MINUTES OF REGULAR MEETING OF THE INSTITUTE FOR ADVANCED STUDY April 18, 1938

A regular meeting of the Trustees of the Institute for Advanced Study was held at the Princeton Inn, Princeton, New Jersey, on Monday, April 18, 1938.

Present: Messrs. Aydelotte, Edgar S. Bamberger, Flexner, Hardin, Leidesdorf, Maass, Riefler, Veblen, Weed, and Miss Sabin.

Absent and excused: Messrs. Louis Bamberger, Carrel, Friedenwald, Houghton, Stewart, Straus, and Mrs. Fuld.

In the absence of the Chairman, the Vice-Chairman, Mr. Mass, presided.

The minutes of the meeting of the Trustees held on January 24, 1938, having been distributed, their reading was dispensed with, and they were approved.

On motion, the action of the Executive Committee taken at the meeting held on March 29, 1938, was ratified.

The following report was presented by the Director and, on motion, was accepted and ordered to be incorporated in the minutes of the meeting:,

With the present meeting the fifth year of active operation of the Institute for Advanced Study comes to a close. How extremely short a period in the lifetime of an educational institution this is, one may realize from the fact that the University of Paris began in the thirteenth century and that the

Universities of Oxford and Cambridge are eight centuries old. Even in America Harvard is three hundred years old, and Princeton University more than one hundred and fifty. The Rockefeller Institute for Medical Research and the Carnegie Institution of Washington, which are nearest in character and quality to the Institute for Advanced Study, were both founded at the beginning of the present century so that they are approaching their forties while we have not yet reached our teens. None the less the Institute for Advanced Study has won a distinct place for itself by reason of the great scholars who form its faculty and the unusual group of men and women who have come to Princeton to study with them.

In the first address which I made to the Trustees of the Institute at their meeting on October 10, 1930, I quoted with approval from an address of President Gilman as follows:

"It is on the faculty more than on any other body that the building of a university depends. They give their lives to the work. It is not the site, nor the apparatus, nor the halls, nor the library, nor the board of regents which draws the scholars; it is a body of living teachers, skilled in their specialties, eminent in their calling, loving to teach."

This is as true today as when President Gilman uttered it in 1876 and obviously as true as when I quoted it almost eight years ago. We have been informed by the Founders that they will present the Institute with a building, but this building shall be of a character that will not interfere with the scientific and scholarly work of the Institute. On the contrary, it will, we hope, be so designed as to make easier and more fruitful the contacts between the members of the faculty and the various persons who come for a year, sometimes more, sometimes less, to work with them. It will, moreover, be a

visible monument, which we now seek in vain when visitors come to Princeton, of the generosity and foresight of the Founders and the character of the Institute itself. But if experience in university development in this country and in Europe has taught anything, it has taught us that the less we invest in bricks and mortar and the more we retain and accumulate in the form of unrestricted endowment, the more likely we are to maintain high academic standards. I have no fear on this score, in so far as the present Board of Trustees is concerned, but I reiterate my conviction, not because I am distrustful of the present Board, not because with the progress of time the personnel of the Board necessarily changes, and every new member of the Board ought to be inoculated with the wholesome doctrine that President Gilman set forth.

The year just passed has from the standpoint of scholarly and scientific activity been the most gratifying that we have yet had. Nothing can exceed the enthusiasm and earnestness with which professors and members have without constraint and without pressure pursued their teaching and research, each in his own individual fashion. The recent bulletin gave in some detail a statement which showed not only what members of the faculty offer but the contributions to mathematics made for the benefit of faculty and members alike by those who are temporarily associated with the Institute. The same kind of statement could be made in reference to the work of the humanists, and I shall, I hope, be able to include a statement of this kind in the next annual bulletin, but evidence, that is even more significant, may be obtained from the happiness of those who are associated with the Institute.

The Institute in conjunction with Princeton University and other institutions of learning has during the past year issued a superb volume embodying the results of its recent excavations in the ancient City of

Antioch, copies of which lie upon the table. We have been offered several additional copies so that any Trustee who is desirous of possessing this beautiful volume may procure one without cost if he will so notify me.

Professor Meritt, who published in the course of the current year a valuable volume on the finances of the Athenian empire, has now in press a second volume, the publication expenses of which have been borne by the American School of Classical Studies at Athens, the Guggen-heim Foundation, and the Carnegie Corporation of New York. In addition, the Carnegie Corporation of New York and the Rockefeller Foundation have made appropriations which enable a number of scholars to take advantage of the facilities offered by the Institute without any expense whatsoever to the Institute itself.

As further evidence of the spirit that prevails in Princeton I may add that Professor Lowe, who, as I supposed and as he supposed, had enjoyed ideal opportunities for many years at the University of Oxford, came to see me the other day for the sole purpose of saying that never in his life had he been so happy or so effective and never had he been surrounded by so stimulating a group of men as in Princeton during his two years of residence. I could quote many other expressions of the same sort which come to me unsolicited from professors, members, and visitors in each of the three schools now in operation.

We have achieved the results which I have mentioned with a budget that is almost incredibly small and in the face of social and financial conditions that have created grave difficulties for all endowed institutions of educational and philanthropic character. We have been enabled to do this partly by reason of the cooperation of Princeton University. Little did we think when we made our beginning in 1933 that five years

thereafter financial conditions would be as bad as or worse than they then were. On the other hand, it is much easier for an old, established institution to slow down its pace than for a young and lusty infant such as the Institute for Advanced Study. While, therefore, I believe that we must proceed with the utmost caution, I also believe that we must proceed with courage and with faith in the future. Let us not forget that the most significant event in the history of modern universities was the creation of the University of Berlin in the early part of the nineteenth century when from every practical point of view the fortunes of Germany were at their very lowest ebb; Germany had just been crushed by Napoleon; the University of Berlin was the answer von Humboldt made to the disaster which had overtaken the Prussian state. Napoleon passed away. The University of Berlin not only grew and survived, but became a model, according to which every German university was remade during the course of the nineteenth century. American institutions of learning, while undoubtedly dependent upon funds, are not operated for profit and, while they must be soundly and conservatively managed, they cannot afford to be stampeded by what is obviously a transient phenomenon. Whatever may happen in Europe, America will not "go to the dogs", and if it does "go to the dogs", then it is immaterial whether funds are in the possession of individuals, of corporations, of foundations, or of educational institutions, for the loss which overwhelms one of them will overwhelm all. Within narrow limits I am, therefore, of the opinion that it is our duty as Trustees to go forward, not backward.

In making these remarks I have particularly in mind the importance of placing the School of Economics upon a more adequate basis. We have in this school as now constituted three young men, who approach the general social and economic problem from three different points of view. In the

course of time each of these three divisions should be strengthened as means become available. I propose to begin with economics because, as I said in the first report from which I have already quoted, "Where and how we begin must depend on the men and women of genius, of unusual talent, and of high devotion, who may be found willing to be associated with us." Through good fortune, such as I had no reason to anticipate with assurance, though for seven years I have eagerly looked forward to it, we can in the near future probably associate with ourselves in the department of economics two or three men who correspond to this description. I am not prepared to state the absolute amount which will be needed to secure them, nor can I state that we will secure them, but the amount will not at first, in my judgment, exceed annually \$50,000 or \$60,000 in addition to our present expenditures. I propose, therefore, to ask the Board to authorize me to take such steps as may be necessary to place the department of economics upon a basis approximately equivalent to that of the other two departments. That will involve getting the men and raising the funds.

There are, I know, doubts in the minds of many people as to whether economics can be made a legitimate subject of scientific inquiry. I enteretain no doubt on this subject. Of course, I cannot speak as an economist. My conviction is based upon study and reflection which I can readily describe to members of the Board. Mr. Riefler, who is both an economist and a man of affairs, can give better reasons for this conviction than I can possibly state, but in general I venture to make two points:

l. Every science has gone through precisely the same stages as economics is now passing through. There was a time when all the natural sciences were absorbed in alchemy, and the attention of the alchemists was devoted exclusively to converting base metals into gold. During that long period no one could possibly have guessed that out of alchemy would

in course of time emerge the modern sciences of physics, chemistry, biology, etc., and even so none of these sciences possesses the degree of finality which they were supposed to possess as recently as twenty-five years ago. Professor Einstein remarked to me the other day that any book on the subject of mathematics is out of date after five years.

"What does this mean?" I asked.

"It means that mathematics is a progressive science, that we understand more about it now than we did five or ten years ago and that mathematicians five or ten years hence will understand better than we understand now."

A discovery recently made by a young man of about thirty years of age at the branch of the Rockefeller Institute near Princeton throws an entirely new light upon certain mysteries which have baffled medical scientists ever since medicine entered upon its scientific development, which itself is of very recent origin.

2. These considerations must be borne in mind when we discuss the possible science of economics. It may well be that economics will never obtain precisely the position occupied by physics just as it is quite possible that biology will never obtain the precise position occupied by physics, but these difficulties are a challenge. If we concern ourselves only with what is safe, there would be in existence no research institutes whatever either in medicine or in the more general fields occupied by the Institute for Advanced Study. Sciences, whether they be natural sciences or social sciences, are the van guard of human thinking and human progress. They live dangerously. They take chances. They lose life, time, and money. How far any one of them can progress in the course of the centuries no one can foretell. We are quite comfortable for the time being in the field of mathematics, but it is a mistake to suppose that we shall remain permanently comfortable unless, as time goes on, we take chances precisely as Dean Fine

took them when he founded and developed the great Princeton group, the existence of which has meant so much to the Institute. I make no prophecy, and I promise myself nothing as to how far we can get in the subject of economics. I know something of its pitfalls and perils, but I do not believe that we can abstain from taking our share in the effort to place economic theory and practice upon a more solid and extensive basis of observation and study than that upon which it has rested up to recent times. For these reasons I hope that, if the Board should approve this report, its approval will mean that it assents to the position which I have outlined so that I have its authority to proceed in precisely the same cautious way in which I proceeded in building up the School of Mathematics and the School of Humanistic Studies.

It is certainly not without significance that at a time when we curselves here in Princeton are considering this important question Lord Nuffield has given the sum of £1,000,000 - two-thirds of the entire endowment of the Institute for Advanced Study - for the founding at Oxford of Nuffield College, which will be devoted mainly to study, teaching, and research in the field of economics and allied social sciences and that simultaneously the University of London has created an Institute for Economic and Social Research, towards the development of which American foundations have made liberal subscriptions.

I am happy to report that the health of Mrs. Fuld has improved, and I hope very much that, when spring has once more unmistakably come to Princeton, she and Mr. Bamberger may drive down to Princeton for the purpose of seeing their friends here, and this is a wish in which members and professors of the Institute and the University concur.

Following the reading of the foregoing report there was considerable discussion in reference to the Director's suggestion of development in the field of economics. Messrs. Aydelotte, Riefler, Weed, Hardin, Veblen, and Maass participated.

Mr. Aydelotte led by pointing out that it is absolutely clear that no subsequent Federal Administration can under existing conditions operate its financial affairs without obtaining the best available economic advice. The difficulty at the moment is the paucity of highly trained economists who have also had practical experience in finance and business. Economics has become a necessity for the government at Washington just as medicine has become a necessity for the Federal Public Health service. He stated that, while the Institute had done a superb task in mathematics and the humanities, he felt that, if a similar task were done in the field of economics, the Institute would gather for itself new laurels from persons whose opinions are worthy of respect.

Mr. Riefler spoke next as follows: "Within the last few days
Professor Morris of Oxford has been visiting us in Princeton, and it is
quite clear that English business men, statesmen, and government officials
are feeling precisely the same pressure that is felt in America, namely,
the need of a larger supply of highly trained men and the need of a place
such as Princeton where economic data gathered in various places can be
subjected to much more careful and critical scrutiny than is now possible
anywhere. There is a special timeliness about developing economic study at
this time because various countries are engaged in different types of
economic experimentation, but nowhere is there a group of detached and
highly trained and able scholars who are in position to study their methods
and their results. To distinguish between these different experiments and
to understand what is actually taking place would be an enormous service to
every government in the world. Schacht, for example, has in Germany done

things that nobody believed could be done. How has he done them? What has been the result - not the apparent result, but the real result? No one knows. Schacht's work, therefore, is first-rate laboratory material. The same thing is true in England, in Italy, and in the United States. It will do us no good to wait a generation to study what has been going on. We ought to be able to study it as it happens precisely as a physician studies patients while they are sick.

Moody's records form an enormous body of source material which no economist has ever had the opportunity to study adequately. The conditions for such study exist in the Institute, as they do to some extent in the National Bureau of Economic Research. Out of such studies will emerge in time not only individuals but groups of men who may be able to accomplish in the field of economics something approaching the results which are attained in scientific fields by groups of men working harmoniously."

Mr. Flexmer emphasized the fact that thus far economics had been cultivated in universities where men are stationary because they have teaching to do. Professor Riefler's work has carried him to Washington, New York, Geneva, Paris, and London. It has also brought to Princeton men from all these centers and others - Stockholm, for instance. We must be in position to work out a new technique, and, inasmuch as the Institute is not and does not have to be organized uniformly, the economists in the Institute will enjoy an enormous advantage over men who are university professors.

Mr. Hardin asked whether in dealing with economics we were not dealing with mass psychology, which is an irrational factor.

Mr. Riefler replied: "There is no question that mass psychology plays an important part, provided public policy is unsuccessful. If, however, economists can forestall difficulties and make their contributions to economic thinking in advance, the danger of irrational or political moves is greatly diminished."

Following further discussion, it was suggested that
the Director do what he did when starting the School of Mathematics
and the School of Humanistic Studies, namely, visit those who are
attacking the same problems in London, Oxford, and perhaps one or
two other places for the purpose of finding out what they are
doing, how they view the problems, and for the purpose of establishing cooperative relations. The proposal of the Director was
unanimously approved whereupon, on motion, it was

RESOLVED, That the Treasurer be and hereby is authorized to provide funds for an exploratory visit of this kind in the near future.

Mr. Hardin, Chairman of the Finance Committee, stated that the report of the Finance Committee would be made by the Treasurer. The Treasurer said that the report of the Treasurer at this time concerned the budget, which was embodied in the report of the Budget Committee.

Mr. Weed, Chairman of the Budget Committee, made the following report, which was accepted:

At a meeting of the Budget Committee on April 7, 1938, the Director presented the follow-ing estimated budget for the year, 1938-1939:

Administration	\$30,600.00 175.00 2,750.00 3,000.00 3,000.00 1,620.00	• \$41,145.00
School of Mathematics		. 145,459.00
Salaries Teachers Insurance and Annuity	\$100,630.00	220,200,00
Association of America	4,479.00	
Technical Assistance	1,000.00	
Stipends	30,000.00	
Publications and Subscriptions	3,350,00	
Contribution to Fine Hall	6,000.00	
School of Economics and Politics • Salaries Teachers Insurance and Annuity Association of America Stipend Janitor	\$39,200.00 1,900.00 2,500.00 270.00	43,870,00
School of Humanistic Studies Salaries Teachers Insurance and Annuity	\$69,800.00	. 91,995.00
Association of America	2,355.00	
Stipends	18,150,00	
Subscription to Journal	100.00	
Rent	1,320,00	
Janitor	270.00	
Equipment, supplies, books, 69 Alexander Street, etc. 3,000.00		
Travel, communication, printing, entertainment, etc. 3,000.00		
	Total	\$328,469.00

The budget is increased by contributions for specified purposes as follows for the year, 1938-1939:

Rockefeller Foundation	
School of Economics and Politics	\$2,000.00
School of Humanistic Studies	2,500.00
Carnegie Corporation of New York	
School of Economics and Politics	750.00
School of Humanistic Studies	7,250,00
Carnegie Institution of Washington	
School of Humanistic Studies	4,000.00
	\$16,500.00

In view of the distinction which the Institute has obtained, it was the opinion of the Budget Committee that the total expenditures contemplated were modest in the extreme. The Treasurer stated that two independent outside agencies had conservatively estimated the probable income of the present endowment for next year: one at \$328,000, the other at \$330,000. There is, of course, a chance that, unless business improves, the income may fall below the estimates above quoted. The question, therefore, arose as to how the situation should be met in view of the fact that no one can be absolutely sure. Several decisions were reached:

- The Chairman of the Board is of the opinion, and in this members of the Budget Committee concur, that the present financial situation is primarily political rather than economic.
- 2. The voting of the proposed budget for next year cannot create a deficit of any considerable proportion, if any.
- 3. If a deficit actually exists at the end of the year, the following year's budget should be decreased unless additional funds are procured.
- 4. In view of such financial uncertainty as exists, no commitments should be made in the matter of stipends for the year, 1939-1940, now or at the October meeting.
- 5. Stipends for the year, 1938-1939, represent commitments made at the meeting of the Board in October, 1937, and can not now be modified; but in case any stipends already awarded for 1938-1939 lapse, no additional appointments should be made but the sum thus saved should be returned to the Treasurer.
- 6. The policy which the Board has pursued in previous years, namely, passing a budget which is well within the calculated income of the Institute, is sound, but on the other hand gradual development of an institute which within the period of five years has shown such vitality cannot be and should not be prevented.
- 7. On the basis of the foregoing considerations the Committee recommends that the budget for the year, 1938-1939, be fixed at the sum of \$330,000.

Mr. Maass, Chairman of the Committee on Buildings and Grounds, stated that four architects were submitting theses accompanied by projections and drawings, that these would be mounted, and after the Committee had met, a special meeting of the Board of Trustees would be called that a report might be rendered to the Board. The Chairman stated that each architect would be paid for his services and the theses and projections would thus become the property of the Institute.

Officers to serve until the next annual meeting were elected as follows:

Mr. Alanson B. Houghton, Chairman and President
Mr. Herbert H. Mass) WisserChairman and Visco-Presi

Mr. Walter W. Stewart)

Vice-Chairmen and Vice-Presidents

Mr. Samuel D. Leidesdorf, Treasurer Mrs. Esther S. Bailey, Secretary

Mr. Abraham Flexmer was reappointed Director of the Institute, and the Secretary was instructed to cast one ballot for Mr. Flexmer.

The Chairman announced the appointment of the following standing committees:

Executive Committee

Mr. Stewart, Chairman Mr. Edgar S. Bamberger Miss Sabin Mr. Straus Director

Finance Committee

Mr. Hardin, Chairman Mr. Louis Bamberger Mr. Leidesdorf Mr. Maass Mr. Riefler

Budget Committee

Mr. Weed, Chairman
Mr. Aydelotte
Mr. Stewart
Treasurer
Director

Committee on Buildings and Grounds

Mr. Maass, Chairman

Mr. Aydelotte

Mr. Veblen

Director

Committee on Nominations

Mr. Riefler, Chairman

Mr. Friedenwald

Mr. Weed

The Founders, Chairman, and Vice-Chairmen are members of all committees.

There being no further business, on motion, the meeting adjourned.