

## THE CONDUCT OF A SEMINARY IN ECONOMICS

I understand this to be a conference for frank and informal discussion of experiences in teaching economics. I have no theories to advance, and am by no means certain that the conditions in other institutions are sufficiently similar to those in Harvard University to make the experience of myself and my associates of much value. But we have had to do for some twenty-five years with the supervision of the work of students engaged in research, have tried sundry experiments, and have come to some conclusions which may serve as a basis for discussion. In view of the purpose of the conference, I trust you will forgive me if the first person is used with some frequency.

The first question always is the selection of subjects upon which to put the students to work. For some time an endeavor was made by us to find a single seminary subject—one which could be parceled out among the students, or upon which at all events they could work together. This is a familiar method in training for research in philology and in history. One subject is selected for the term or the year and all the seminary members are expected to confine themselves to this. There is a promise of gain through conference between the students; there is a unification of their work; not infrequently the subject is one upon which the instructor is himself at work, so that there is gain for him as well as for the students.

Nor is there lack of topics available for treatment in this way. At one time, for example, we selected the doctrinal history of John Stuart Mill's *Political Economy*. Everyone conversant with the history of economic theory knows that this book is a remarkable mosaic. Mill culled freely from Adam Smith, Ricardo, Malthus, Senior, Chalmers, the elder Mill, Rae, and others. We believed it would be instructive to a group of men to follow the intellectual pedigree of Mill's doctrines, and to observe the remarkable skill with which he had combined them into a whole having at least the appearance of unity and consistency. Each student might take one of the earlier writers—say Adam Smith or Ricardo or Rae—and report on the extent and the manner in which Mill had used contributions from this predecessor.

Still another possible subject of the same sort might be found in the tariff history of the United States. That happens to be in some sense my own special subject, and I have planned more than once to give a seminary course upon it. Each student might be assigned some one industry during a given period, say the cotton manufacture, the woolen manufacture, glass, pottery, iron, and so on. Each in searching for materials was to bear in mind that he should inform other members of the seminary concerning material relating to the various subjects assigned to those others. All were to have a common interest, a common aim, a common guidance. Economic history, to some phase or other of which we turn our students so often, seems to afford many subjects appropriate for investigation by this method.

Notwithstanding the promise of the plan, we have found it on the whole unsatisfactory and have given it up. Experience has not confirmed the expectations of gain. It has proved difficult to get together a sufficient number of students each of whom was capable of research and at the same time thoroughly interested in the subject proposed. It is of the first importance that your student's heart should be in his subject. Yet in order to secure work by all upon the selected joint subject, it becomes necessary to persuade and half coerce some to whom the particular topic does not appeal. Moreover, the work of the various men always proves to be unequal, and unequal to an embarrassing extent. After all, the proportion of those who have the ability and the persistence to carry research to a successful conclusion is not great. Many fall by the way, and before long it appears that some should be discouraged rather than encouraged. In actual operation it has proved that, where a group of students is put to work on one subject, only two or three do anything that signifies, and that these carry on their work after all in as much isolation as if there had never been an attempt at co-operation.

The best way of conducting instruction on a highly specialized topic seems to be to let the instructor himself do most of the work of exposition. Among advanced students who take such a course it may be advantageous to encourage research; and some of the stated meetings may be given to lectures by the students themselves.

But exercises of this sort should be confined to men who have shown real capacity. In the ordinary course of things the exercises in such a course should be in charge of the instructor himself.

I have come to the conclusion, therefore, that the seminary should not profess to be a stated course on a selected subject, or even a group of subjects. It should rather be a clearing-house where those engaged in research are to present their results and get the benefit of criticism and discussion. The subjects of research should be various and should be selected in conference between the instructor and students; inevitably affected by the special work and special interests of the instructor or instructors, but nevertheless probably covering a wide range. Each student should confer individually with the instructor under whom he does his work and should report from time to time to the seminary. It is by no means necessary that these reports should be delayed until an investigation is carried to the end. Whenever a chapter is complete, so to speak, a report of progress may be made. It is highly advisable that each student should report at least once a year.

It has now become the established practice at Harvard University to conduct the seminary in economics in this way. The meetings are not in the nature of class meetings. They are announced publicly (in the *University Gazette*) and are open to all members of the university. Almost invariably there are persons present at the meetings who are not members of the seminary at all. Occasionally the speaker or the subject is such as to attract attention, and the representation of outsiders is considerable. I believe the presence of others than the members of the seminary is to be welcomed. There is always a considerable number of graduate students or other advanced students who are interested in research work but have not yet reached the stage at which they have entered upon it for themselves. To these it is a stimulus and a gain to be present and see how the thing is done. To the seminary members themselves who are presenting their results the presence of the outsiders is also an advantage. One of the things sought is practice in the presentation of results, and this practice is better gained if the audience does not contain familiar faces only.

The interest of the seminary meetings and the stimulus from

them are increased if other persons than the students themselves take an active part. The instructors of older and younger grade may present papers or state the results of work upon which they are engaged. Outside persons, whether from other institutions or from the business ranks, may be enlisted to advantage. If the seminary meets once a week, as is the practice at Harvard University, there are usually plenty of opportunities for securing participation by others than the students and instructors.

A word now as to the selection of subjects for the individual man. Most students do best on subjects in "applied" economics. I would by no means underrate the value of independent work in the field of economic theory. But students usually do such work best in connection with a systematic course: a course, say, upon the history of economic theory, or upon some special aspect of theory, such as value, distribution, international trade. Where independent research in the field of economic theory is suggested it may advantageously be upon some particular author—some writer whose works are in themselves worth reading and give occasion for narrative work and historical inquiry as well as for critical examination of theory. The best subjects as a rule, however, are not in economic theory; for this requires an incisiveness of thought rarely found in beginners. Concrete problems of a narrative or historical character are ordinarily preferable. They should be such as involve not only the collection of facts and materials, but the consideration of some general theorem. For example, I set a student to work upon the history of silk manufacture in the United States with a view to ascertaining if protection to young industries had been successfully applied. He had plenty to do in following the development of the industry, the course of the imports, the history of legislation, the debates in Congress, and the discussions in the press. At the same time he had always to keep in mind the relation of his facts to the reasoning on the underlying question of principle.

One desideratum for a subject should be borne in mind, which in no small degree limits choice. There should be a considerable volume of accessible material. Every one of us can think of subjects which are interesting, but on which it is extremely difficult to

tell the student what to do from day to day or week to week. The student himself is likely to suggest some such subject—attractive but not practicable. If the material is widely scattered, above all if it needs to be got together from unrelated sources, he should be warned against it. I am the last person to propose work of research which shall consist solely in wading through routine material—the *Congressional Record*, for example, or the *Statutes at Large*. But it is none the less desirable that there should be some material upon which the student can proceed steadily. It is only at a later stage, when one has acquired wide acquaintance with the general literature of economics and has had considerable experience, that a subject can be taken in hand which requires the piecing together of scattered information. It may not seem a promising operation to tell the student to go through the *Congressional Record* and find out exactly what happened to the silk schedule in every tariff since 1860; but it at least gives him something systematic to do. And while he is doing it he will encounter, there and elsewhere, clues as to other sources and suggestions for other inquiries, which will broaden his scheme of work. Similarly, the student who may be interested in economic theory can be put to work upon the writings of a particular economist—such as Ricardo, Thünen, Senior, McCulloch, Henry C. Carey—and can plunge at once into a careful examination of the writings of his selected author. In due time he will feel his way to other related writers and to illustrative material in the general literature of the subject.

One thing to be considered in the selection of a subject is the possibility of its expansion. The immediate topic should form a consistent whole; but the topic is the better if it is also susceptible of enlargement. To give an example from recent experience of my own: the telephone situation in Great Britain is a curious one, and is quite enough for a seminary task or a Doctor's thesis. But it is only a part of the telephone and telegraph problem the world over; and the investigator who has covered the ground in Great Britain can then enlarge his subject by taking up other countries also. The possibility of not only completing a limited piece of work such as is suitable for the Ph.D. requirement, but of making a serious contribution in a larger field, is a strong stimulus to the

ambition of an able man. As we all know, some of the best scholarly work, in this country and elsewhere, has been the outcome of a task begun in the early stages of economic study. It must be considered, however, that subjects which offer this additional advantage are not overabundant, and that it is well to make sure of the quality of your man before allowing him to pre-empt one of them.

Still another question concerns the stage at which the student should begin research. It is possible to begin too early, and it is possible to delay too long. The young student from the typical American college, even though he be a capable fellow, is rarely qualified to begin work of research during his first year in a graduate school. He does not know enough of general economics; he needs first to take a year of systematic study of advanced grade upon several of the economic subjects. In his work upon one of his stated courses he may be encouraged to undertake a preliminary job of research, which will test his quality and give him practice in putting things together. He should be advised not to undertake research independent of his courses until the second year of graduate study. On the other hand, he should not delay too long. It takes time to get together materials and to mature results. Moreover the spirit of initiative and independence should be encouraged. Side by side with his continued general preparation in economics, he should have at a reasonably early stage the satisfaction and the stimulus of working on a subject of his own.

Oral statement is, I am firmly convinced, the only useful method of presenting results at the seminary meetings. The reading of papers should be prohibited. I know of nothing more appalling than the procedure at some German universities. The student brings out a lengthy manuscript, plunges into it, and reads interminably, presenting every detail of his work and every tittle of evidence. Students should by all means be encouraged, even though not required, to put their work in writing. It is a good rule to require every student, before the close of each year, to sum up his work for the year in the form of a written statement—a report put together as if for print. But to read from manuscript at the meetings is deadly. The student should rehearse, so to speak, with the

instructor in charge and prepare a careful arrangement of his topics. He should put upon the blackboard, or on manifolded sheets, statistics or salient phrases. But when the time for action comes, he should talk, not read. Not only is there an obvious advantage from liveliness of interest; there is the invaluable practice in oral delivery. No student who is incapable of presenting his work in this way should be allowed to persist in preparation for the teaching profession, or even in a career of research.

Finally, the seminary meetings should not last too long. Members should be required to keep within reasonable limits of time. At Harvard University, the men are told to talk not more than forty-five minutes and to present what they wish to say within this limit. Interruptions and questions should be permitted—even encouraged. Yet the instructor in charge must keep his hands on the reins, brush aside irrelevant questions, and prevent discussion from becoming desultory. This requires tact, for if questions are frequently suppressed or the answers to them are postponed, they will not come at all.

F. W. TAUSSIG

HARVARD UNIVERSITY

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### THE ECONOMIC SEMINAR

In the seventies of the last century, when graduate courses began to be developed in our universities, and higher degrees were offered for work in research, the example of the German seminar was naturally the one to be followed. Our scholars had studied in Germany; and the German methods of teaching, including the lecture system, were generally adopted in spite of the fact that conditions prevailing in America were different from those in German institutions. Although the problem method (or the laboratory method) of teaching introductory and advanced courses of economics has now practically won the day against the American recitation system, as well as against the German lecture system, the German type of seminar still obtains in most universities. Remembering that, in most courses in German universities, the professor, supposedly an expert in his special field, followed the strict lecture