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ADDRESS OF THE CHAIRMAN OF THE SOCIAL SCIENCE RESEARCH COUNCIL[1]

By Dr. EDWIN B. WILSON

HARVARD SCHOOL OF PUBLIC HEALTH

I AM very glad to greet the guests and members of the council assembling for our annual meeting in this historic building of the oldest, broadest and most distinguished learned society of our country and I have to express to the American Philosophical Society the thanks of the council for permitting us to gather here.

It was fifteen years ago come New Year's that the American Statistical Association elected me to the council. I have attended most of the fifteen annual and spring meetings since that time with pleasure and profit, and have missed the few others only for the most compelling reasons. There are some few connected with the council who have a longer record.

My experience over these fifteen years has convinced me that our constituent societies are often quite ignorant of the aims and the opportunities of the council whose regular members they elect. Some of the societies seem at times to think they are sending us representatives whose duty it is to maintain close contact between us and their societies for their benefit. This certainly is not the case. It is not necessary and indeed it is scarcely possible that the council should be of any direct and immediate use to the individual constituent societies or to their individual disciplines. Those elected by the societies are here with the opportunity of viewing social science as a whole and of determining how best to serve it.

In the past fifteen years with which I am acquainted and in the preceding five of which I have heard the council has tried to help in a number of ways. When

[1] Given at the opening session of the annual meeting, held in Philadelphia, September 17, 1942.

I first came upon the council it had large project funds to spend. The meetings of the Committee on Problems and Policy were long; the chairman of the committee had a very onerous task; the council itself met for long sessions. We took the distribution of these funds very seriously. Projects came to us from divers persons who wanted funds for research. We did not merely select the projects that seemed the best and appropriate moneys for their support. The projects were referred to standing advisory committees which examined them with primary reference to improving them with all the collective wisdom that we could bring to bear, to the end that we might support the best projects we could formulate from those submitted. The result in my opinion was that we aided projects which were far better than they had been in the form in which they were submitted to us. We performed a real service in improving social science, a far greater service than if we had merely supported the best of the projects as they came to us.

Later when project funds were no longer available we entered upon a program of planning in so-called areas of concentration—industry and trade, international relations, consumption and leisure, etc. There were perhaps eight of these large areas which we defined. To my way of thinking the aim was excellent, namely, to select important areas needing investigation, problems important irrespective of the disciplines involved and generally involving, as many if not most important problems do, more than one discipline. If only one could plan for consistent research in such areas in a connected way, bringing to bear the collected wisdom and assembled techniques of our membership and of those who would accept appointment on our advisory committees, a great service would be rendered to social science, a service which isolated individuals in different disciplines could not render any more than we as a council could render to social science research those services which are peculiarly the function of the individual investigator or the individual discipline. This program of areal planning had some successes and, as must be expected, some failures.

More recently we have dropped the areal concept as our leit-motif; it proved to be too ponderous and insufficiently adaptable. We are planning still, be the scale large or small, in spots where it seems that planning is likely to be fruitful. And we have undertaken appraisal with some interesting and important results on which Mr. Redfield reports. In a sense appraisal is the opposite of planning; it looks back and evaluates accomplishment attained or methods used, whereas planning looks forward to new results, but both are necessary to the most effective improvement of science. Appraisal and planning are more important in the social sciences than in the natural sciences which have developed so far that in many respects they are almost self-planning and self-appraising step by step.

How our activities may develop over the next decade one can not at present say in any detail. For those who to be happy must have constant change it doubtless appears that the council has always been changing and always will; to those who find their greatest interest in the uniformities or quasi-uniformities of nature, it will doubtless appear that the council has held and will hold a single course directed toward improving the quality rather than increasing the quantity of work and of personnel in the social sciences; this was its aim when it started and this has been its direction ever since. Nobody need worry that the quantity of writing in the social sciences will ever fail, the emotional drive to write one's opinions and to proselytize others and the emotional drive to do something to the world about us (however so little we practice the Confucian principle of doing something to ourselves) are strong enough to maintain a high degree of activity in social science. Indeed, these drives are so persistent that they must be counterbalanced by conscious and conscientious effort to improve the scientific quality of work in this field if improvement is to be assured. Herein has lain and still lies the council's unique opportunity.

I should perhaps state explicitly, what may be apparent, that the word science will cover almost anything and on different occasions does, from the art of the billiard player or ball pitcher to the technique of the mathematician or chemist. As we use it here in the council, the meaning is more akin to the latter than to the former. It is, I presume, in this meaning that John Dewey used the word in his statement.[2]

(1) One of the only two articles that remain in my creed of life is that the future of our civilization depends upon the widening spread and deepening hold of the scientific habit of mind; and that the problem of problems in our education is therefore to discover how to mature and make effective this scientific habit. Mankind so far has been ruled by things and by words, not by thought, for till the last few moments of history, humanity has not been in possession of the conditions of secure and effective thinking. Without ignoring in the least the consolation that has come to men from their literary education, I would even go so far as to say that only the gradual replacing of a literary by a scientific education can assure to man the progressive amelioration of his lot.

Scientific method is not just a method which it has

[2] Taken from a "box" on p. 57 of Bull. No. 1143 of the University of the State of New York, July 1, 1938, giving the proceedings of the 73rd convocation held in celebration of the one hundredth anniversary of the Division of Science and State Museum on October 15, 1939. Much of this statement was included toward the end of Dewey's address "Science as subject matter and as method" at the Boston meeting of the A.A.A.S. in 1909. See SCIENCE, vol. 31, p. 127, 1910.

been found profitable to pursue in this or that abstruse subject for purely technical reasons. It represents the only method of thinking that has proved fruitful in any subject—that is what we mean when we call it scientific. It is not a peculiar development of thinking for highly specialized ends; it is thinking so far as thought has become conscious of its proper ends and of the equipment indispensable for success in their pursuit.

If ever we are to be governed by intelligence, not by things and by words, science must have something to say about what we do, and not merely about how we may do it most easily and economically. And if this consummation is achieved, the transformation must occur through education, by bringing home to men's habitual inclination and attitude the significance of genuine knowledge and the full import of the conditions requisite for its attainment.

(2) The other "article" is faith in democracy as a social mode of life.

It is in a similarly restricted sense that J. B. Conant used the word science in his round-table discussion at our annual meeting two years ago. As John Dewey emphasized that if we are ever to be governed by intelligence, not by things and by words, science must have something to say about what we do, so J. B. Conant emphasized that science was that which persisted and accumulated. Science has to persist and to accumulate if we are to have the assured information to say how we may most easily and economically accomplish something and still more must science have those characteristics of persistence and accumulation if we are, with any assurance other than that of the gambler, to say what shall be done.

It is no use to minimize the difficulty of realizing the aim which the council has set for itself and no use to expect large or immediate results. We have gradually to replace a literary by a scientific education, as Dewey says, and that takes generations, not collegiate generations, but human generations; we have to train the teachers of the future. It is so easy to be tempted to accept a high-sounding generalization. Peace without victory—does history show that one attains peace that way? Then there is Dewey's second article of faith—in democracy as a social mode of life. An excellent article of faith for our mores, but if we are to get away from governance by words and if science is to tell us what to do, science must give us foundations for our faiths; because actually it is our faiths and our emotions which really control us in our doings. What would a scientific approach tell us about the advantages or disadvantages of the adoption of a faith in democracy as a way of life? Additional evidence may be available during this century.

In this summer's reading I came across something quoted with approbation from Aristotle by one of the great humanists of his generation, C. C. Felton, whilom president of Harvard College, in "Ancient and Modern Greece," Volume I, page 482:

> The insolence of demagogues is generally the cause of ruin in democracies. First, they calumniate the wealthy, and rouse them against the government, thus causing opposite parties to unite against a common danger. Next, they produce the same result by stirring up the populace and creating a sense of insecurity. Nearly all the tyrants of old began with being demagogues. . . . In well-balanced commonwealths, besides strict observance of established laws, it is especially necessary to keep close watch upon little matters. For a great change in the laws may creep on gradually, just as a small expense often incurred ruins a large fortune. . . . Next, let men be on their guard against those who flatter and mislead the multitude; their actions prove what sort of men they are. . . . Of the tyrant, spies and informers are the principal instruments. . . . War is his favorite occupation, for the sake of engrossing the attention of the people, and making himself necessary to them as their leader. An unbridled democracy is exactly similar to a tyranny. Its objects and instruments are the worst, and both are equally served by the tamest of mankind. It is always anxious to lord it as a sovereign; it therefore has its flatterers in the shape of demagogues. Ancient customs must be done away with; ancient ties, civil and sacred, must be broken; everything must be changed according to new and false theories; and the result is an assimilation of democratic to tyrannical government, in its habits and modes of action.

This passage is not only an indication of the sources from which danger may come to democracy; it is a series of theorems on popular government. Were they true as of Aristotle's time? Do they remain true to-day? The function of science is to bulwark opinions of the wise with proofs by the patient after modifying those opinions in the light of the evidence available. For some of the social sciences, this function may perhaps be exercised adequately by comparative contemporary studies on a wide geographical base; but for some of them only the studies of comparative history will serve, for the reason that the development of societies is a slow process. "The absence of romance in my history," wrote Thucydides, possibly in reference to Herodotus, "will, I fear, detract somewhat from its interest; but if it be judged useful by those inquirers who desire exact knowledge of the past as an aid to the interpretation of the future, which in the course of human affairs must resemble if it does not reflect it, I shall be content."

The council has lived through two decades of hectic times and the end is not yet, nor will be for two decades more. In our early days we had what our director has called the magnilucrous twenties—the New Era written with capitals and supported by some able economists as permanent—and there was to be no top. Then we had the great depression from which

some economists drew the inference that depressions were self-accelerating with no bottom. These are the ways the crests and troughs of the waves appear to the seasick. Yet with the present state of social science as a science who could say with assurance, at the time, that the New Era economists were wrong and the doubters were right? Until there is a sounder scientific basis than appears to me yet available one can not be certain beyond reasonable doubt that those who turned out to be right or wrong were not so by chance. And how many of our historians have taught twenty college classes that an armistice was an armistice and that war was inevitable and that all of us should be steeling ourselves for it? What type of analysis would prove in 1935 that war was inevitable? The talk we had by a member of the State Department, I believe at Lake George, was sufficiently realistic so that none of us who heard it need have been heedless. We must have better teaching of history, of cultural history, of history serviceable in the Thucydidean sense to our State Department or the State Department will have to take a hand in the teaching. I hope Mr. Nichols may have something to say to this point.

Appraisal, planning, economic history and cultural history are enough and more to furnish the council with opportunities for exercising what our reviewing committee termed the primacy of its intellectual leadership; but there are of course other topics, some of them close to the heart of the chairman of our Committee on Problems and Policy.

People have talked about social science problems for all of recorded history; they probably have talked about the weather for quite as long. It would be of great benefit to all of us if we could know what the weather would be in the next crop season, but meteorological science has not advanced to where it can tell us. We must not expect too much of social science. We could not regulate the weather even if we could forecast it a season ahead; all we could do would be to adjust our actions to it. There is always hope that if we knew the economic and social future we could do something and would do something about it, other than adjust ourselves to it; but be that as it may, we can at least so educate ourselves as to adjust better to whatever may develop and that is in itself worth while, it is in line with being governed by intelligence.

We meet for the first time with our country at war. This ancient building and the American Philosophical Society have seen meetings during our every war from that of the Revolution to the present. If we disregard Indian wars, the periods of peace have averaged about twenty-five years; none has exceeded thirty-five years. As scientists we have to take the evidence of history that war is a recurrent phenomenon of society. Whether it can be prevented or not is very difficult to say. My old friend, F. A. Woods, biologist and historimetrician, came to the conclusion thirty years ago that war had not been less under the reign of the Prince of Peace than previously. My colleague Sorokin finds little evidence that war is decreasing. Against the background we have, we may infer that it will require extraordinary efforts to prevent future recurrences, and we must in nowise console ourselves that even with extraordinary efforts we shall be successful. If we were to approach scientifically the study of those efforts which might be most likely to succeed we should have intensively to study the conditions which had led in the past to the most enduring peaces and the conditions which had led to their rupture. We probably shall not approach the matter that way, but permit ourselves to be governed by words and things. Already all sorts of persons are coming forward with plans which are little more than emotional slogans, and this will continue, probably with acceleration. I will not advocate preparation for a peace conference; all I would suggest is a better knowledge of the conditions under which peoples live together in peace; I would seek exact knowledge of the past as an aid to the interpretation of the future which in the course of human affairs must resemble if it does not reflect it. The future of this country deserves the effort of the search even though the conclusion be that we must forever "speak softly and carry a big stick," neither of which suits some of our emotionalists.

THE AMERICAN INSTITUTE OF PHYSICS

A REPORT TO PHYSICISTS

By HENRY A. BARTON and GEORGE H. BURNHAM

THE American Institute of Physics has completed more than ten years of ever-increasing activity in behalf of its members, the five founder societies and, in turn, all physicists and the science of physics itself. Because of the increasing scope and importance of its activities, it is desirable that not only the physicists of the nation but all those interested in the advancement of science become better acquainted with the background, organization, and activities of the institute.

Briefly, the institute is a union of independent societies—the American Physical Society, the Optical