social life, people's political life, as well as people's industrial life, are based upon a conception of human happiness.

One of the things that interests me about this experiment, philosophically speaking, is that it has developed and come to such success as it has during a period when the industry in which the experiment was made is in the contracting phase of the business cycle, as Professor Wesley Mitchell calls it; when the industry in general, throughout the country, is on the decline; when we have had in that particular industry a thing which Professor Simon Patton used to call a deficit situation. He was always interested in pointing out to his classes in the old Wharton School that we got the flower of our civilization, of artistic achievement, during the surplus periods. During the deficit periods of civilization he said we got a tremendous impetus to ingenuity and to organization.

It is interesting to me that this experiment has grown up in an industry which was at the time of its development on the deficit side of its life. If it is true, as Professor Wesley Mitchell, who is one of our most competent economic observers, seems to think, that we are now passing into an industrial period which is on the deficit or contracting side, perhaps within the next twenty-five years we shall see the same ingenuity and a similar type of organization generally develop out of this deficit in all industry.

Another thing that has interested me considerably about this experiment is that it offers a pattern which may be used by other industries for other purposes. You had in mind a particular problem; you had a particular set of questions to which you had to find answers if the industry was to survive. Other industries have other problems which they must solve. We in the Department of Labor are constantly concerned with this problem in all industries: How can your industry so organize itself as to prevent the constantly increasing number of industrial accidents, which are not only fearful things in cost for industry but are fearful things in the losses which they inflict, both economically and humanly, upon society. Could not this relationship between employers and employes be used and developed for the prevention of industrial accidents? As I see it, workers are generally not concerned with the prevention of industrial accidents on the economic side. They are only concerned with the accident if it affects them individually. In other words, they remain individualists instead of becoming a part of the social organization of the factory. Therefore, the cost of the industrial accident, its economic importance, has little meaning for the worker. If the industrial accident had an economic and social, as well as an individual, meaning for him, it is just possible that out of that relationship we should get the beginnings of a safety movement which would be truly successful.

You probably are entirely familiar with the state figures which show almost universally that industrial accidents which spring from personal carelessness, that is, the accidents which we roughly classify as the slip, fall and stumble accidents, appear to be increasing, whereas the accidents due to machinery itself appear to be decreasing. In other words, insofar as mechanical devices could be set up to prevent industrial accidents, there appears to have been a definite improvement over the last twenty-five years, whereas there is no improvement, and perhaps a positive increase, in the other type of accident. If we are to handle that problem, which is a human problem, with any success, it has got to be by some kind of co-operative relationship between management and workers.

It is very important in this unemployment insurance which you are attempting to work out at Naumkeag that you realize, as has every industry which has attempted to work out a scheme of unemployment or lay-off insurance, that there will necessarily be very considerable changes in the method of planning the production and the sales of the plant. It is extremely significant that the workers at Naumkeag are involved in this planning of sales and production.

For labor to become significantly involved in planning the economic and financial side of any industry, to become an important influence upon its planning for production and sales, I feel would mean a much greater victory both for labor and for the future of human happiness in America than any number of successful strikes for immediate shorter hours or higher wages. That is because labor would be bound in the end, if it is true to the mission which it has assumed, and I believe it still is, to use its influence in planning both production and sales and in the development of the industry to preserve those human values which are the essence of the meaning of civilization.

I hope that in this pattern we are going to have a number of other experiments made in other industries. Then very gradually and very slowly we may evolve a new type of industrial civilization.

April. 1930

Another significant thing about this experiment, and one which ought to be thought of if any similar experiments are to be tried in any part of the country, is that here there appears to be an organization, susceptible of use for many purposes, in which the organization itself and the relationships between employer and employe spring naturally out of the work, out of the process and out of the method. This idea of the value and importance of the integration of the type of organization for human activity with the type of organization for production is an idea which Robert Bruère pointed out to me a number of years ago and which I have been brooding over ever since. It must be at the very bottom of all activities scientifically planned for the improvement of an industrial society. For instance, most of us have had a queer feeling about welfare work in factories, however good it may be to have health examinations, clinics and nurses, however good it may be to have schools for the teaching of English and other cultural or vocational subjects in connection with factories because they are convenient places. We have all felt a kind of shrinking away from that sort of activity, from that sort of good action which was laid on an industry without spontaneous relations, without springing naturally from the people involved. At Naumkeag a pattern

seems to have been formed in which the co-operative organization is integrated with the organization necessary for the production of cotton sheeting, and that is why it is essentially a sound and scientific pattern for use in other industries.

I have a great hope and a great belief that the next ten years are going to see the sharpening of a sense of organization in industry, a development of a willingness on the part of the American people to think of themselves as having a real life, a full life, a complete life, in their jobs, in the places where they work, and in connection with the industries in which they serve the community.

If people could once become as interested in the entire industry as the old shoemaker used to be in the shoes which he made for his friends and neighbors, we should have a truly civilized society. For the most part, in the development of a machine and scientifically managed industrial life we have management having all the fun and the worker having nothing but the drudgery. As you all know, monotonous work is pure drudgery if there is no conception of the meaning back of it. Scientific\* managers have had a great time and a lot of fun in the last ten or fifteen years, but I think that the working people of this country have not begun to share in that fun which comes from a sense of having a great and powerful system under control. If the workers come to share in that, we shall have not only civilization but a happy industrial civilization.

NE of the most common statements of writers more impassioned than veracious is that the methods of American industry are "brutalizing" the working population. To whate extent does this statement express the truth?

To this question, as to many others, it is not possible to give an answer except by examining actual American life. Strangely enough, America is perhaps the last country where the effect of mechanization on the working population should be studied. For I insist that such a study can be of value only in case the subjects studied are subjected to a system under which their mental or physical condition can be attributed unhesitatingly to their living conditions. . . . how can we essay any conclusions regarding the American people

without danger of straying immediately into the most questionable assertions?

If a visitor, recently impressed by reading of the monotony of Taylorized work, should go through a factory, he would be immediately tempted to establish a relation of cause and effect between the work to be observed and the degree of intelligence reflected in the appearance of the workers. But if a worker who has arrived completely illiterate only two years before from the plains of the Ukraine should look rather bewildered in an American factory, one ought not to hasten to attribute his appearance to the influence of the machinery surrounding him even though certainly it may contribute but little to the development of his mind.) (H. Dubreuil, Robots or Men? pp. 225-226.)