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How Can the Human Race be Improved

BY EDWIN GRANT CONKLIN, PH.D., D.Sc.

PRESIDENT GEORGE M. SMITH:—Gentlemen, our guest of honor today is Dr. Edwin Conklin, Professor of Biology in Princeton University, and one of the most eminent of American Biologists. To scientists he is extremely well known for his research work during the past thirty years. And for that work he has been honored by learned societies in many parts of the world, in many countries. To the wider public he is known as the author of two books, "Heredity and Environment" and "The Direction of Human Evolution," and as a very stimulating lecturer on biological subjects. After hearing him before the Royal Canadian Institute on Saturday evening, I understand the reason for that popularity as a public lecturer. He has the gift of making the difficult problems of biology intelligible to laymen. On your behalf, I have the greatest pleasure in welcoming him to the Canadian Club.

PROFESSOR CONKLIN:—Mr. Chairman, gentlemen of the Canadian Club, I am highly honored by the invitation to speak to you today and I realize that this is not a three-hour-for-luncheon club such as, I understand, can be found on the other side of the border, possibly on this side. But before I launch into the subject I want to discuss with you, may I take this opportunity of saying how greatly I have appreciated the hospitality of the people with whom I have come in contact here in Toronto. It has been a great pleasure to come back to renew some scenes which I had seen only before in my youth, to see how amazingly you have grown, especially how your university has developed in thirty years.

And now I am going to begin with a question I had suggested as a topic for my remarks. I suppose I ought to apologize for ever presenting a topic so inclusive, for it includes everything you and I are vitally concerned in. It is: "How Can the Human Race be Improved?" We are all engaged in one way or another in trying to answer that question. Business men have their part, educators particularly have a part, the clergy, the churches are tremendously interested; governments, nations exist for this purpose and, of course, these are things upon which our eyes are chiefly focussed and they are vastly important. But there are other elements and factors that are also important, such as environment, which deal with that which lies outside race stimuli that come to the individual in some way. Every living being is in this sense a physiological organism, responding to stimuli; and in the development of any individual what is happening is, that stimuli are around the individual and responses are being made. Education, if it is worth anything, must recognize that sort of biological fact. There are people who somehow seem to think that education can be given to an individual. We have heard otherwise sensible people talk about giving education to an individual. Why, if it is not something that comes from within, if it is not a response that is automatic that comes somehow from within, it is not real education.

What the teacher, what the preacher, what the statesman can do is to help to bring useful stimuli to bear upon this individual so he will respond in a desirable manner. The whole progress and development of an egg to an adult individual depends upon such responses. The egg begins by making certain elementary responses to the stimuli that come to it, and then another stimulus is followed immediately by another response. And so on continuously: the whole process of development is a physiological process in which the organism is responding to stimuli; and in education, in religion, in statesmanship, in the arrangement of the laws and courts, we are trying to bring upon human beings stimuli of such a sort as will elicit from them the proper response. Take education for example. I emphasize that because my life has been pretty largely devoted to this work, therefore looking through the glasses of a professor, I have

come to see that the all-important thing in education is to help young men and women to develop the right habits: good habits of body, good habits of mind and good habits of morals. If we can get good habits established, they will meet a situation and respond instantly because the habit has been established. These are the essential things, I think, in education. Information is a secondary matter. Of course, information is important, but if you can establish in the minds of young people the habit of serious study, of concentration, the habit of desiring to know, the information will take care of itself.

Well now, as I have said, these things are stimuli. They come from without. They come upon the organism, but the organism itself is very important. Charles Darwin, who said everything practically that could be said in the matter of life evolution, tells us that while evolutions of reactions are caused by environment, the nature of the response depends essentially upon the nature of the organism that is stimulated; and that is so. A man stimulated—we see it best when we deal with different species—a man stimulated in one way with a certain sort of environment, may be expected to respond in a certain manner if he is normal. But an entirely different response would be got from an animal. That is a totally different organism.

Now, in human society, as the world population increases, we are increasingly faced with the problem—the increasingly serious problem—of the defective, the deficient and the delinquent types that we find amongst us. That is a very serious problem which confronts civilization everywhere, but particularly I think, it affects us in the United States. We have there, as you are all aware, the most unenviable reputation in criminology, in murder. The murder rate in the United States is twenty-seven times that of Great Britain. These conditions are causing all serious-minded citizens of the country a great deal of alarm. What can be done about it? Well, if you read the newspapers and get the names of these persons who are the hijackers, racketeers and murderers, you will be impressed, as I am, with seeing how nearly uniformly they are not Anglo-Saxon names. We are suffering in the United States from the short-sighted policy that has been pursued for three hun-

dred and fifty or more years of yielding to the desire for cheap labor. That desire introduced African slavery and with it a problem we have never yet solved and, so far as I can see, will not solve until we solve it in the way in which the southern nations of Europe solved it centuries ago. You go to Sicily, to southern Italy, you look for the Africans that were once slaves and you find a darkening of the complexion of the general population into which they have melted. And while this may not happen in one hundred, two hundred or five hundred years, given time enough and it has never yet happened that two races, however distinguished, have occupied the same territory for a thousand years, without lessening their distinctions and becoming blended.

That thing is going on apace today everywhere where different races meet. I was amazed in the year 1914 in Australia to learn that there were more half-castes in Australia than there were original Blacks. Essentially the same thing is true in New Zealand, so far as the Maoris were concerned; there are more half-castes than pure-blooded Maoris. That, of course, is going on in southern Africa, where there are bastard races. It is going on in South America. In general, hybridization is going on there. It is going on in the United States. There are, it is said, about a quarter as many mulattos as there are full-blooded Blacks in the United States. The condition of the Blacks of the United States, as you know, has been one of social inferiority, one in which they have been discriminated against, (slaves until recently), and yet mixing with the white race. Then we have brought into our country these outcasts of other countries, because not infrequently it used to be the rule in certain European countries to say to a criminal, "you have a chance of going to prison or going to America." They chose America and we have had a great many from that sort of immigration. And it is not merely that we have brought into our country undesirables that are not good citizens, but we have freely invited them into our homes and given them our children in marriage so that they have become part of us. What I am saying of the United States would, of course, apply equally to any country in the world where race mixture is going on.

Now let me enlarge quickly for fear you may be mistaken. I do not maintain that race mixture is an injurious ideal. As I said in my lecture before the Institute on Saturday night, probably most of our domestic animals and cultivated plants are results of hybridization of the best types that we have, gotten by bringing together two different forms of animal or plant, each of which had desirable qualities, but not combined in a single individual. But by the mixing of hereditary traits, the combining of both these desirable things in a single individual can be done. The crossing of different types of people where races are very distinguished, as African and European, is injurious. Now the breeder who is looking for superior wheat, corn or breed of chickens, cattle or horses, very rigidly eliminates all but the best. He keeps the best. He, therefore, has a superior type. Well now, those laws of good breeding, in the biological sense, apply to man just as surely as they apply to horses, chickens, corn or wheat; and if we are to improve human beings by crossing them, our taking-off place must be by rigid elimination of the bad elements in some way. And that is a pretty large order. Indeed, it is a question whether it will be possible to go even any appreciable distance in improving the breed of man, under conditions that prevail in human society and which are likely to prevail in future years and future ages. In one sense, by attempting to apply the principles of the animal and plant breeder to the human race, we should lose more than we should gain.

After all, there are other things to be desired more than physical perfection or even mental perfection, however desirable that may be. Man is a very complex creature. He has not only this physical nature, this mental nature, he has a social nature, and our social instincts would be ruined if we were to attempt to apply the rigid rules of elimination of breeding that can be applied to domestic animals and cultivated plants. Consequently, I do not think we need hope to apply these rigid rules to people. Francis Galton, who established the doctrine, or what is sometimes called the practice, of eugenics, realized this very perfectly. He knew it was not possible to make of the human race or of any single part of the human race a breeding-pen of some sort

in which you would have the finest types of individual produced. On the contrary, he pointed out that what eugenics should undertake is to reduce the birth rate among inferior types and increase it among superior types.

There are some people now, as there have always been, who maintain there is no difference between the inferior and superior. One of my old friends asked me what I thought of the doctrine of Thomas Jefferson that all men are created equal. All men are created equal—not equal in stature, color of skin, eyes, hair, not equal mentally, socially—all men are equal before the Lord. Each man is entitled, as our Magna Charta states, to life, liberty and the pursuit of happiness. They are human rights. But they do not create men equal and, as a matter of fact, no two men in the world are equal in any regard. Every individual has come from a different egg cell and is absolutely the first and last of that identical kind. That is an amazing fact, but it is true. There is no such thing as the universal equality of mankind. There are superior and inferior types.

It behooves the intelligent part of society to look not merely to this present day, not merely to cheap labor at this present time, but to look forward a hundred, a thousand, a million years, if you have vision that is long-sighted enough to vision that. Mankind, the human species, has been on the earth in all probability no less than a million years, probably more than a million years. There is every reason in the world to believe that our descendants, your descendants will be here on the earth one million, two million, perhaps a billion years to come. Astronomers have given us a lot of time. They say the sun will give out heat enough for a billion years to come. And conditions here—why the human race is in its infancy! We have just begun. I want you gentlemen to get what I call the long view—the long view of mankind.

Look forward to the ages, to the millennia, that are to come and ask yourself, "what is the greatest thing I can do to benefit mankind for all these ages to come?" I have said repeatedly, I have said several times, that the greatest service that any man or woman can render to society, greater than the kind of service that you and I are engaged

in, in education, in preaching or in the courts, greater than statesmanship, the greatest service that men and women can render to society is to see that their line does not die out, to see that they leave worthy descendants in the world. And so you see I am preaching to you what might be called the doctrine of positive eugenics. The duty of men and women is to see that their race does not die out.

The greatest danger that confronts the Anglo-Saxon race today lies right in that direction. I am confident that is true. I have recently been through China, India and Japan and have noticed the conditions that prevail in these Oriental countries. There the most honorable salutation that can be addressed to a woman is, "may you be the mother of many sons." Even in those overcrowded countries where the population is so dense that it is a curse, this is the most honorable salutation that can be addressed to women. Whereas in our Western world, not infrequently it happens among people of high intelligence, we often hear it said, "I would rather die than have children."

Well, I have said something about positive eugenics. What about legal enactments? Some of you would have liked to hear me talk about prohibition, but I hope I am too wary for that. The doctrine has somehow invaded the United States and, to a certain extent, Canada, that by legal enactment all desirable things in the world could be brought to pass. Someone says there ought to be a law—a law with no sentiment to back it up, and it is a dead letter. That is what is happening in most parts of the United States with regard to prohibition. A very desirable movement to start with in order to get rid of abuses, drunkenness and all that went with it, and yet brought upon the public at a time when, at least in large centres of population, the people were not prepared for it, they did not welcome nor want it. And the question is a question about which many American statesmen are saying "what are we going to do?" Well, I am glad to say I am not a statesman and do not have to answer that question. Time alone can furnish the solution. I do not see how we are to get prohibition out of the constitution. It takes two-thirds of Congress and three-quarters of all the States.* It shows

*By article V of the Constitution of the United States.

the difficulty of bringing about an improvement in mankind and that is really what is aimed at.

The motives were excellent. No question about it. The failure was due to the effort to do that merely by legal enactment. Really the only hope for mankind is to persuade mankind in some way of the wisdom of certain behaviour. It comes back to this in the end, even though we need a better type of mankind we are not likely to get it by legal enactment. We have to get it by persuasion. We are not autocracies where one great dictator can tell us to do this or do that. And the result is we have to raise the level of intelligence by means of education. We have to persuade the people by means of the facilities we have, we have to impress the people with the necessity about which I have been speaking.

Education in this broad sense is not merely university, or school education, but education in the broad sense in which society conveys to coming generations the acquired experience and wisdom of the past one—a thing in which man alone is unique. We are animals in almost every other respect but in this capacity of conserving the experience of the past and handing it on to future generations. Upon this civilization is based. Our whole civilization did not come out of nothing. It did not come about in a century. It stands on the shoulders of the generation that went before. The human individual must begin his life down in the valley of the germ cells and slowly in the process of development comes to the summit of public society and with giant strides passes from mountain top to mountain top. And so it happens, society, civilization, culture, science, advance at this tremendous rate. Our inherited traits remain essentially as they were in the time of Adam. Well, it is only by means of this broader kind of education that we can hope to improve the human breed. And I believe that I speak the truth when I say that education in this broader sense is the great hope of human improvement in the future.