

SOCIAL DARWINISM

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It is not my purpose to advance any new social thesis, or to present a statistical elaboration of the notions which I shall suggest in the course of this brief paper. It is rather my hope so to group certain queries as to provoke discussion, and thereby suggest lines of investigation to other students in this field.

In social biology we are quite deprived of the power to experiment, and our ability to come to any accurate knowledge of the processes of social life depends upon our control of statistical machinery, as soon as we ask questions not provided for in census schedules. This is incidentally, you see, a plea for the endowment of statistical research in the field of social biology.

Let me hasten to explain the term which I have borrowed from European writers to define the field to which I venture to call your attention, admitting at once that mine is only one of the approaches to the study of social phenomena. By "Social Darwinism" I do not mean those propositions of the doctrine of evolution which Darwin chiefly emphasized, in distinction from others which, in the opinion of later students like Weismann, he overlooked; but the general doctrine of the gradual appearance of new forms through variation; the struggle of superabundant forms; the elimination of those poorly fitted, and the survival of those better fitted, to the given environment; and the maintenance of racial efficiency only by incessant struggle and ruthless elimination.

Its leading propositions are then these: In the first place, there are always more individuals born than can possibly come to maturity and propagate their kind. This is a corollary from the limitations and accidents of the physical environment, and the fact that each species is the food of others. Secondly, many at birth vary considerably from the hereditary norm, and no two

individuals experience exactly identical conditions of life. Thirdly, those poorly adapted to their life-conditions are eliminated, while those more perfectly adapted survive to the reproductive age. This may be viewed as selection by the environment, but is often mere chance. Fourthly, the efficiency of the given type is easily reduced as the rate of elimination and the severity of the struggle are lowered since, in the fifth place, the survivors transmit their qualities to their descendants, whether these are above or below the racial average. We are not vitally concerned with the question whether this transmission through heredity is of congenital qualities only, or these modified by the life experiences of individuals previous to parenthood; nor with the question whether variations are by small individual differences, or by mutations as De Vries thinks. Through variation, adaptation, the struggle of competing forms, elimination, survival, and heredity, organic life undergoes a slow modification, age after age, in a process that results in extinction, or variety, and what we call progress.

This explanation of how the infinite variety and hierarchy of organic forms came about may be, and has been, applied, as by Spencer, to human institutions and types of thought. We may note the inherited element in them, their variation in each generation, the fierce struggle of competing forms, the elimination of the weaker forms that lie buried in history like extinct fossils, or are found as survivals in the civilized or savage societies of the present day; while in the line of progress we note the slow increment of favorable social variation, and the undoubted transmission of social acquirements in social heredity through the unbroken series of the generations. This is to consider human achievement as necessarily involved in the universal process, and not due to an intervening divinity or to the lawless whims of men.

We have been forced to a more vital and organic interpretation of history, and to the obvious conclusion that the activities of human society can be better understood in their simpler, ruder stages, where the lines are fewer and the outlines less compli-

cated. Such names as Morgan, Tylor, Lippert, Frazer, and Westermarck at once occur to us in this connection.

But, while there is here an undoubted gain in perspective and in method of approach to the understanding of social institutions, it seems to me a serious question whether biological terms can with advantage be taken over into historical sociology. We expose ourselves to the danger of needlessly playing with analogies, when there are adequate terms at hand in common use with which to describe the course of institutional development. We may and must adopt the evolutionary point of view, but do not require the biological terminology.

The application which I make, however, of the term "Social Darwinism" is to an entirely different set of relations, where the biological terms are not analogies, but are entirely appropriate. It is in the field of social biology, and to the investigation of the manner in which social institutions and doctrines influence the competition, elimination, survival of individuals and groups of individuals. These phenomena are measurable in exact terms, since they merely involve organic relations of a high order of complexity. The pioneers in this field are, as you know, Galton and Karl Pearson in England, Steinmetz in Holland, Shallmayer and the contributors to *Ploetz's Archiv* in Germany.

Allow me to remark, in passing, that the relations to which I have just referred may be reversed when human types appear as the causal force which expresses itself in varying social forms and relations. We then have racial or anthropological sociology approached by the comparative or psychological method. It may tell us, for example, how Chinese social institutions are an expression of Chinese character, and proceed to compare them with the Japanese or English as racial products. It may show how these peoples recreate their institutions in a foreign soil, or modify them as they are themselves modified under alien influence. It may set out more exclusively from racial psychology, as does Vierkandt or Fouillée. With Lapouge and Ammon it may become an apotheosis of an assumed Aryan race; or, with H. S. Chamberlain, Wilser, and Woltmann, the cult of the god-

dess Germania—a divinity with golden hair, blue eyes, and long head.

At least one difficulty with many writers of this school is that they are apt to travel in a circle. They do not know the psychology of any people except from the very data which they forthwith deduce from that psychology. Many of their inductions are inferential, and their results uncertain and inconclusive.

With the reversed direction of forces it is otherwise. Social institutions effect human lives through marriage-rates, birth-rates, disease-rates, and death-rates, in ways that are entirely capable of measurement. The same is true of schools of thought or dominant social doctrines. These may weaken or strengthen a group or race in the struggle with competitors through their bearing upon the physical units concerned. An instance of this will make my meaning clear. It is probable, as was long ago suggested by the abbé Huc, that Thibetan Buddhism, through its quietism and prevalent celibacy, so undermined the people of Mongolia that the Mongols ceased to be an aggressive and conquering nation.

Our question is then this: What is the deposit of social phenomena in terms of population? How does the given social condition as a cause express itself in measurable modification of population as effect? How is the social factor correlated with the struggle, elimination, or survival of the physical units that are competing, and with the composite classes, nations, or races? The individual is always the concrete measurable fact primarily concerned, but by the summation of its component elements we arrive at the biology of the group. We are thus able to study the life-history of all competing social groups, whether these are institutional or racial, functional or genetic.

Human selection is now chiefly social selection. What we call society is the sieve by which human beings are sifted, and, as Steinmetz¹ says, the sociologist should know best its construction, and the process of sifting.

Allow me to indicate at once some of the problems of social biology that await a satisfactory solution. In part these are new

¹ *Wolf's Zeitschrift*, 1906.

problems, in part very old; but what is new in our age is their definite recognition and segregation, as well as the control of the only machinery adequate to their solution—the machinery of statistics.

First as to certain social habits. What is the effect of a large consumption of alcohol by a given group or people, when measured in terms of the individual as a physical creature, and by the number and quality of his offspring? What sort of lives are eliminated by this form of excess? It is usually assumed that these are the inferior beings, but it often seems to me that they are the best. In Germany they are devoting much scientific thought to this question, which is not a medical question only, as with Forel, but a statistical and evolutionary one. This consumption of alcohol among occidental peoples has attained unheard-of proportions. If this is a necessary characteristic of western civilization, what is the bearing of the fact upon our competition with the Chinese or Japanese, who are comparatively temperate? Reid's theory, that immunity is gradually acquired among a people by the elimination of individuals and stocks subject to this failing, is at least important enough to receive scientific consideration, and rejection or acceptance. This it has not, as far as I know, received. If it is a sound conclusion, it has important practical corollaries.

So with syphilis and other venereal diseases. What is their meaning in the biology of the individual and society? Are their victims eliminated? Is there any connection between all these and the increasing indications of comparative sterility among the highly civilized? With these is connected prostitution as a selective agency. How does this express itself in celibacy, disease, marriage, and birth-rates? We know the answer in single cases, but not statistically. We need, not inferences, but sound inductions based upon adequate data.

Again, we know but little about the effect in the directions indicated of a large consumption of narcotics, such as tobacco, opium, and cocaine. These certainly cause direct modification of nerves and tissues, and indirectly, as modes of outlay, curtail other and more vitally important expenditure of income. In the

competition of individuals, classes, and nations, what is the selective advantage of those who abstain from these things?

Secondly: What is the correlation between biological values and the kind and degree of education? During much the greater part of the existence of the human species the life and training of the child was in the open air. It was largely also a training of the muscles and senses. It was further ruthlessly severe in eliminating the physically weak and defective. We civilized people herd our children in close rooms for the best part of at least eight years, just at the critical period of adolescence, and endeavor through books to train the purely intellectual faculties. Here is certainly a selection for other qualities than those that formerly favored survival to maturity and the multiplication of similar beings. Is this educational selection one of the causes of civilization, or does it go far to explain its decay; or both? Are the intellectual qualities that our educational methods and much of our social system favor correlated with health and fecundity, or with weakness and extinction? With physical vigor or physical degeneration? What is their sequel in insanity, sterility, celibacy, and physical deterioration?

The graduates of our colleges, the more intellectual occupations, the better-trained social classes, and the more cultured nations have in common a high age at marriage, a low birth-rate, a large proportion of celibates, and a high suicide and insanity rate. We still await satisfactory investigations into the question raised by Francis Galton as to the generative implications of a highly intellectual life. How is it correlated with fertility and with the physical and mental qualities of offspring? What is the proportion of the abnormal or degenerate among the children of the highly gifted? What is the fact as to the alleged extinction of such stocks? Galton and Karl Pearson have indicated the methods that await a wider application in this field.

It is especially necessary that such investigations should be undertaken among that half of the community that is only just beginning to participate in our modern educational advantages. We do not know the biological effect upon girls of even a high-school training, or what penalty in celibacy, sterility, or ill-health

a college education for women may involve. Several foreign scholars have arrived at the conclusion that there is an alarming increase in the proportion of mothers unable to nurse their own infants among the better social classes. Though colleges for women have not been established long enough to afford an adequate statistical experience, such facts as we have are not encouraging from a biological point of view. Nor have we as yet learned much about the children and grandchildren of our women graduates.

Thirdly, as to certain social practices. We are expending upon the defectives and dependents vast sums, which must be earned by the more capable and thrifty, and constitute a serious financial burden. Are we in this multiplying the unfit and increasing their proportion in the community? We dismiss from our insane asylums twenty thousand persons every year, and allow them to re-enter family life. We train deaf-mutes and the blind to become self-supporting, and able to marry. We care for the chronic inebriate and pauper, periodically, and let them out to become, periodically, fathers and mothers. We shield those of criminal disposition by every device known to the law, until we are the most criminal people on the face of the earth.

What are the relative fertility of these classes and the character of their offspring? Mr. Dugdale in the *Jukes*, Dr. Jorger in "Die Familie Zero,"² Charles Booth, and others have merely made a beginning of the investigation required. Everything seems to indicate that stocks of a certain type of degeneracy do not die out. If this be so, our charities can be justified only on the condition that large numbers of individuals are not allowed to become parents. I hesitate to raise the same question in regard to some incidental results of modern hygiene and medicine. In so far as these concern those in later life, they do not come within our consideration. In fact, however, the improvements which science has brought about in death-rates are at the younger end of the scale. We have bettered those at ages below forty. Does anyone know what this may involve in terms of

² *Ploetz's Archiv*, Vol. II.

selection? The answer which most people would probably give to this query may be in the words of Toennies :

It is very rarely the hardy and robust natures that manifest a taste for books, eagerness for knowledge, pleasure in solitary reflection and creation, or skill of speech and mental power. On the other hand, we sometimes meet with extraordinary mental endowments in men and women who are afflicted with tuberculosis, curvature of the spine, etc., and are forced to lead a contemplative life that produces priceless treasures even in its too brief duration. How numerous are the poets, musicians, painters, philosophers, and savants that are short-lived! All of these considerations must rid us of the notion that the gifted constitute a normal variety needing only an average fertility, when mated with the equally gifted, to produce a special race of like endowment. In truth, the most capable women have fewer children and are for the most part little suited for motherhood, while the higher social strata must always be renewed from the reservoir of vitality among the people. Heredity of rank and power corresponds but poorly with inheritance of capacity, and degeneration, not infecundity, is the curse of every ruling caste.³

This is partially true, but does not answer the questions raised by the non-selective breeding of human beings on a large scale. The human species and its foremost races developed under a rigorous weeding-out of the weak. Is it a priori likely that it can be maintained in physical efficiency upon the cessation of that rigorous selection?

We may well question, at this point, the trend of socialism, as well as of trade-unionism in some of its aberrant, and it is to be hoped temporary, manifestations. If these tend to afford an equal chance of survival and of parenthood to the incapable and weak, to discourage the energetic and ambitious, directly or indirectly, they must in time have far-reaching effects upon population. Certainly some of their features promise to modify considerably the conditions of the struggle for supremacy among individuals, classes, and nations. In a recent paper upon "Migrations," Flinders Petrie remarks :

Migrations are the inevitable means of supplanting the less capable races by the more capable, as in all the past course of organic life. Every bar to the free leveling by peaceful migration, such as exclusion laws, is a confession of weakness and shows that a convulsive migration will occur so

³ *Zur naturwissenschaftlichen Gesellschaftslehre*, p. 60.

soon as the pressure becomes strong enough. The only way to save a country from immigration is to increase the capabilities of its inhabitants by thorough weeding, so that other races cannot get a footing by competition or by force. The ideals of the present time: equality of wages, maintenance of the incapable by the capable, equal opportunities of life for children of bad stock as well as good stock, and the exclusion of the more economical labor, are the surest means of national extinction. The greatest of all problems to a true statesman would be to weed as thoroughly and remorselessly as nature does, with the minimum of disturbance and pain.

Mr. David Heron, in his *Draper Research Memoir*, concludes an elaborate statistical study of certain social coefficients of birth-rates as follows:

As far as the present investigation goes, it demonstrates, I think, conclusively, that for the London districts there is a very close relationship between undesirable social status and a high birth-rate. In districts where there is overcrowding, where there is a superabundance of the lowest type of labor, where it is needful to employ many young children in order to earn daily bread for the family, where infantile mortality is greatest, there the wives of reproductive ages have most children. Where there is more culture, as shown by a higher proportion of professional men; where there is more leisure and comfort, as shown by a higher percentage of domestic servants; where the traders who appeal to the improvident and thriftless are fewer in number, there the birth-rate is least. Again, where there is more general pauperism, where the signs of bad environment, like phthisis, are prevalent, where pauper lunatics are most plentiful, there the birth-rate is highest. Nor is the higher birth-rate of the undesirable elements compensated by a higher death-rate. The net fertility of the lower status remains higher than that of the superior status. The birth-rate of the abler and more capable stocks is decreasing relative to the mentally and physically feebler stocks.

One might raise the same questions in regard to heavy taxation, which appears to be the inevitable price of civilization. What part has it played in the decline of population through its effect upon vital phenomena, at the decay of the cultured nations of the past?

With this we arrive at the characteristic habit of civilized man, which is to live in cities. Existence in great cities involves a more radical revolution in the environment of the whole life than does modern education in the life of the child. It is the most significant phase of the present period of history and bulks

larger than in any previous age. It involves the substitution of the city alley for the forest path, and of the dark room for the open air. What is the selective meaning of all this? I do not refer particularly to the anthropological theories of Ammon and Lapouge, although I think they have raised some questions that, as yet, remain unanswered. The one fundamental question is this: Is a city population self-perpetuating? It seems to me that Hansen, Otto Seek, and Eduard Meyer have proved that such was not the case under earlier urban conditions. We have not established the contradictory proposition for the cities of today when we demonstrate that they now exhibit a surplus of births over deaths, as long as from a third to two-thirds of the urban population is born in the country and reaches the city at the age of marriage and of greatest fecundity. As well claim that stationary level in a reservoir proves that the evaporation and outflow just equal the capacity of the springs at the bottom—when all the time there is a running stream entering at the upper end. Even if improved hygiene, morals, and government should ever render a city population self-perpetuating, in the entire absence of immigration from outside, there yet remain a number of biological questions. What type of man, physically, mentally, and morally, will be favored by the new urban environment? Will physical deterioration be involved, as suggested by the "Report upon Physical Deterioration," and by the undue proportion of those rejected among European recruits for military service from the cities as compared with the country? Do the conditions of city life produce low stature, small lung capacity, defective eyesight, and feeble strength? Or, to refer to a matter upon which Dr. Ward has recently commented, what is the comparative contribution to ability of the urban and the rural-born? City life is, in part, factory life, and many of the same questions confront us as we survey our factory population. Here are involved, besides, dangerous trades, and the employment of women and children. What are to be the biological consequences of our vaunted industrial system?

On the other hand, what of the rural population from which the most energetic and capable have been drafted to go to the

cities and there to breed? We should naturally expect that deterioration would follow breeding from rejected individuals. As the royal report has it:

There is a current of the better and more adventurous people into the towns, and also a smaller reverse current of the feebler and less strong and fit, who are driven back to the land again, the rural districts becoming thus both the recruiting ground and the asylum of the towns.

All recent information from the rural communities of our older states indicate degeneration. This cannot be laid at the door of social environment, for men and women create this; or to natural conditions, for where immigrants have gone in to take the place of the native-born they are rearing large and prosperous families of industrious, frugal, and capable children. We are greatly in need here of a social-anthropological survey of families through several generations, including such of the members as have remained in the country as well as those who have migrated, so as to be able to account for every individual and have accurate knowledge of the life-history of the stocks. Here is a most attractive field for the endowment of research. The question at issue is fundamental. My own conviction is that in the past rural depopulation, and then rural degeneracy, have attended the growth of every civilization, until at length the drying-up of the stream that fed the cities has brought about the inevitable collapse when pressure came from ruder, but more vigorous, neighbors, since cities have been consumers and not producers of human beings. The causes assigned for the fall of empires have been mostly mere occasions.

Finally, what is the evolutionary value of certain ideals? Let us take individualism, the ideal of democracy, which has tacitly figured in many of the phenomena to which I have already referred. Let us go back to one—the higher education of women. This involves essentially the idea that women are individuals, with all the rights and privileges of personality, and not merely the mothers of persons. The two-child system, or the limitation of offspring, is, in part, based upon a recognition of this, in part due to ambition for the children, in part to physical inability of man or woman. Sidney Webb, in one of his letters

to the *London Times*, informs us that in one-third of the reported cases of restriction the cause was the unwillingness of the women to bear children. Steinmetz says: "I incline to the opinion that all higher culture must lead to limitation of offspring. Both the fear of diminishing welfare and the increased emotional sensitiveness make children seem undesirable."

The ideal of individualism demands of women years of education, late marriage, and certain leisure comforts and enjoyments afterward which are not compatible with a large family of children. Puritan families were large, but one is impressed by the mention of second or third wives in the accounts. It was a system of female sacrifice—not to ancestors, but to descendants.

Individualism as a social ideal also accounts for much of the behavior of men upon the family question. Ambition for riches, or power, or fame, or pleasure—all non-social in motive and likely to prove anti-social in their effects—lead men in ages of culture to postpone marriage or to forego it entirely. Francis Galton has recently said⁴ that the obligation of sound people to marry and rear sound children may need the sanction of religion, since it is in fact the one imperative of evolutionary science.

It [Eugenics] must be introduced into the national consciousness like a new religion. The improvement of our stock seems to me to be one of the highest objects that we can reasonably attempt. We are ignorant of the ultimate destinies of humanity, but feel perfectly sure that it is as noble a work to raise its level, in the sense already explained, as it would be disgraceful to abase it. I see no impossibility in Eugenics becoming a religious dogma among mankind, but its details must first be worked out sedulously in the study.

Christianity seems to me to have put its emphasis upon qualities somewhat neglected in the age of its founder, such as fraternity, chastity, and spirituality, to the partial eclipse of conjugal affection, the family sense, and the economic qualities of honesty, frugality, and industry. The disastrous celibacy of the Roman church is one result of this; another is the present helplessness of Christianity before the disintegration that threatens

⁴ *Sociological Papers*, Vol. I.

the family as well as our industrial life. Its original motives must be recovered from the rubbish of traditional emphasis, and these logically lead to much that is meant by Eugenics. They certainly negative drunkenness and immorality, while the doctrine of self-sacrifice may easily be extended to the obligation of parenthood for all healthy men and women, as well as to abstaining from marriage wherever mental or physical defects are involved. Physical soundness of self, offspring, and neighbors is not an un-Christian criterion of the moral quality of behavior.

In China and Japan the family obligation receives the sanction of ancestor-worship. Confucianism hinges immortality upon the observance of certain ceremonies before the memorial tablets by direct male descendants. Upon this ideal celibacy and the limitation of offspring are unthinkable. The whole social system is based upon family solidarity—upon the family rather than upon the individual. It is, indeed, a question whether this can survive when European individualism comes to offer itself to the Chinese as a competing ideal. Not merely will it threaten the system of ancestor-worship and modify the aspirations of the men; it will mean new and insistent claims on the part of women as they become infected with western notions. Is it not likely that the Chinese, too, will come to postpone marriage and limit their offspring? Or possibly Confucianism will triumph because it has a stronger social ideal and inspires a people of finer industrial qualities than our own.

This contrast illustrates clearly what I mean by the evolutionary meaning of ideals. Probably many of the social and religious ideals of the past have been of importance because of their biological results rather than by virtue of such superficial expressions as have attracted the attention of historians. Such I conceive to be the case with Mormonism and polygamy; the latter has proved inferior to monogamy in its exclusive regard for masculine individualism and in its defective family training of the young; while Mormonism, in spite of this defect in its original form, is strong in its insistence upon social solidarity. Protestant Christianity is inferior to both Judaism and Catholi-

cism from the standpoint of social biology, and these will gain upon it rapidly, in numbers, because their family life is sounder.

Neither individualism nor socialism, but "familyism" in the evolutionary, biological sense, seems to me to be the true social ideal. It involves all that is sound in ethics and wise in benevolence or business. What father, under the insights of this ideal, could wish his children to be children of millionaires, or avoid the family obligations that rest upon the well-to-do? As Karl Pearson has recently said:

The great problem is whether limitation has not begun at the wrong end. If a nation is to be strong, there must be wastage; the reckless and diseased must not be in a condition to multiply like the strong and able. At present the strong and able refrain from bringing into the world those who might render it harder for the weak to multiply. They apparently prefer that the weak—too often artificially maintained in workhouse, institute, and asylum—shall pass in and out, multiply and inherit the land. It is not race-suicide; it is degeneracy of type. What is needed is a national awakening, a sense of national duties, and the primary duty of women to raise strong and healthy children.

Men are not plants, and I cannot share the optimism of Luther Burbank as to the future of man in America; but they are animals, and subject, in part, to the laws that govern animal life. Men also have intelligence, and can recognize these laws and their application to themselves. Have they faith and courage enough to make the application?

I have not suggested a social philosophy, but some possibilities of a social science and a few of its applications to practical affairs. I acknowledge freely the bewildering complication of forces that makes the solution of such problems exceedingly difficult. Many of the functions of what we call society do, however, leave a deposit in population that can be measured. For this measurement we need costly and patient investigation of concrete phenomena, by which alone we can attain to a social science which may enable us to escape that physical deterioration which has hitherto attended all civilizations like a shadowing Nemesis.

DISCUSSION

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The fact that I was called upon last July to reply to a paper by M. Jacques Novicow entitled "Social Darwinism," at the London Congress of the International Institute of Sociology, is responsible for the mistake in allowing my name to be placed on the programme to discuss this paper by Professor Wells. I had written out my remarks made on that occasion, and, having kept them, it seemed possible that Professor Wells would follow the same lines as did M. Novicow, and that my reply would have been appropriate. I find myself, however, in a position not unlike that of the widow who kept her husband's door-plate because, as she said, she might possibly marry another man whose name was also John Brown.

In Europe, especially on the continent, there has been much discussion of what they call "social Darwinism." Not all scholars there agree as to what it is, but certainly none of them use the expression in the sense that Dr. Wells uses it. My written remarks, therefore, have no bearing upon his paper. Over there the discussion of this topic relates to two problems: first, the economic struggle, and, second, the race-struggle. Those who appear to defend this "social Darwinism" are biologists mainly and not sociologists at all. Most of the sociologists attack it, as it is there understood. Loria, for example, in his book on social problems has a chapter under the head "Social Darwinism," which is essentially a discussion of Malthusianism. Because Darwin admitted that he received suggestions from Malthus, many people have drawn the erroneous conclusion that Malthusianism may properly be called Darwinism.

The other sense in which the expression is used abroad relates to the race-struggle. The great writers on race-struggles never use the term "social Darwinism," but a number of sociologists have called them "social Darwinists" without knowing what Darwin really stood for. In my remarks upon this topic at London I answered a paper of this character in which M. Novicow, a prominent peace advocate, attacked the doctrine of race-struggles as a cause of social progress, because he considered this doctrine an apology for war, which in his eyes is a most odious institution.

In a word, continental sociologists have usually applied the term "social Darwinism" to two different but cognate doctrines—the economic struggle and the race-struggle, considered as factors of social progress; and in both cases they have felt called upon to combat the doctrine, the first as ignoring certain moral and intellectual factors, and the second as implying a defense of war. The first of these schools are essentially socialists, and the second, like Novicow, are peace reformers. Neither of them seems familiar with the nature of Darwin's teachings.

Professor Wells, however, deals with an entirely different problem, but one that needs just such elaboration because few sociologists and few of the general public are familiar with those fundamental biological concepts which he has presented, in spite of the fact that biological literature and what might be called biological philosophy are now very abundant. The paper of this morning treats also of the problem to which Galton, Karl Pearson, Ribot, Lombroso,

Ferri, and many others are devoting so much attention—namely, the physiological improvement of the race of men. One aspect of that problem was thoroughly discussed yesterday, and it is remarkable that neither the able paper of Professor Ross nor any of the discussions of that paper once alluded to the most important and best-established law of demography—that population is inversely proportional to intelligence. Of course, there are other things of which the same general principle is true. Suicide, insanity, crime, and vice increase as we rise in the scale of intelligence. You do not find them among animals, and you find them less among savages and lower classes than in the upper strata of society. It is lowest in the scale of organic life that we find the highest fecundity, and the law goes back through the entire animal kingdom until we have those Protozoans in which one individual may be the parent of millions of offspring. This law also extends upward to the very topmost layers of society and finds its maximum expression in the very few who have attained to that lofty realm of wisdom where they not only understand the teachings of eugenics, but are capable of applying them to family life.

The doctrine defended by Professor Wells is the most complete example of the oligocentric world-view which is coming to prevail in the higher classes of society, and would center the entire attention of the world upon an almost infinitesimal fraction of the human race and ignore all the rest. It is trying to polish up the gilded pinnacles of the social temple so as to make them shine a little more brightly, while utterly neglecting the great, coarse foundation stones upon which it rests. The education and preservation of the select few, of the higher classes, of the emerged hundredth, to the neglect of the submerged tenth and the rest of the ninety-nine hundredths of society, covers too small a field. I cannot bring myself to work contently in a field so narrow, however fascinating in itself. Perhaps mine is a "vaulting ambition," but I want a field that shall be broad enough to embrace the whole human race, and I would take no interest in sociology if I did not regard it as constituting such a field.

For an indefinite period yet to come society will continue to be recruited, as Mr. Benjamin Kidd well says, from the base. The swarming and spawning millions of the lower ranks will continue in the future as in the past to swamp all the fruits of intelligence and compel society to assimilate this mass of crude material as best it can. This is commonly looked upon as the deplorable consequence of the demographic law referred to, and it is said that society is doomed to hopeless degeneracy.

Is it possible to take any other view? I think it is, and the only consolation, the only hope, lies in the truth—I call it a truth without hesitation, although, so far as I am aware, I am the only one to emphasize it, and perhaps the only one to accept it—that, so far as the native capacity, the potential quality, the "promise and potency," of a higher life are concerned, those swarming, spawning millions, the bottom layer of society, the proletariat, the working classes, the "hewers of wood and drawers of water," nay, even the denizens of the slums—that all these are by nature the peers of the boasted "aristocracy of brains" that now dominates society and looks down upon them, and the equals in all but privilege of the most enlightened teachers of eugenics.

PROFESSOR CARL KELSEY, UNIVERSITY OF PENNSYLVANIA

The time has come for all students to cease quibbling about the relative importance of heredity and environment—both absolute essentials to the life of every human being, and capable therefore of no such comparison. The increase of biological knowledge in the last half-century has given us more definite ideas as to what heredity is, and what it is not. But there is still enormous confusion resulting from the vagueness of the term "heredity." For the sake of clear thinking, in my judgment, this word should be used only to denote those physical characteristics which come to us through the germ cells of the parents. With the union of the germ cells and the beginning of the life of the child, heredity ends and environment begins. We know pretty definitely today that acquired characteristics are not passed on from generation to generation. This fact, along with many others which cannot be mentioned here, is reacting powerfully upon our social theories. We know today, thanks to the researches of our honored president, Dr. Ward, as well as to studies made by others, that social position is neither the index nor the guarantee of individual capacity. Ability is as likely to rise in the ranks of the most lowly as from those of the so-called better class. Here lies an argument for universal education that has as yet been scarcely utilized by our educators.

Another result of our studies is to weaken the belief in superior and inferior races. It now seems very probable that there is an approximate equality of mental ability among the various races, and that race differences are the result of different environments. This again throws an entirely new light upon the problem of immigration and makes restrictive barriers against healthy individuals a confession of weakness at some point. This statement is not to be interpreted as a belief in an absolute, free, and unrestricted immigration. Finally, our opinion as to the intellectual ability of women is likewise changed, and we need no longer discuss whether the education of women is worth while or not.

Society faces, therefore, the problem of the degenerate, whether the idiot or the individual (usually of the better-circumstanced classes) who misuses the opportunities given him. The problem of the physically unfit (by heredity) is, after all, relatively small, and may easily be borne if we but have the forethought to prevent the marriage of the physically unfit. The other problems are much more difficult to solve. Here we may pursue either the drastic method advocated by Dr. McKim in his book on *Heredity and Social Progress*, in which he practically advocates knocking the defectives on the head, or we may neglect the problem entirely and suffer the consequences. We may recognize its importance, but deal with it in the haphazard unco-ordinated method of the present; or we may adopt a more scientific policy, and endeavor to apply to existing knowledge social problems. It is toward this ideal that modern constructive philanthropy is trending, and it is this development of scientific methods which must be the object of the students of the problems so ably set forth in the paper of this morning.

MR. WILLIAM H. ALLEN, GENERAL AGENT OF THE NEW YORK ASSOCIATION FOR THE IMPROVEMENT OF THE CONDITION OF THE POOR

I hope that Mrs. Spencer or Dr. Brackett will say what Mr. Devine would have said in reply to the statements of the morning, that modern charitable

work is making it easier for the unfit to survive. I wish to confine my own remarks to a suggestion concerning Dr. Wells' appeal for sociological inquiry. The misfortune of sociologists in being compelled to derive judgments from books, from other men's opinions, and from stray facts is analogous to the art of a certain sociologist mentioned in a current *Harper's Weekly*, who declared that he could tell a man's politics by looking at him. The crowd was very much impressed when he picked out a man who voted for McKinley, another who voted for Cleveland. One man whom he picked out as being a Bryan man, however, replied: "No I've been sick; that's the reason I look that way." Similarly, sociologists look at the poverty, overcrowdedness, wretchedness, and squalor of the East Side; they notice an increase in crime and vice among the immigrant Jews—and the decadence of the race is described in textbooks; the story goes on and on increasing in size, until someone else discovers that these same Jews are buying real estate, forcing superior races out of mercantile pursuits, and filling our high schools and colleges. Does anyone believe that competition is less rigorous because these sometime less fit have been enabled to survive?

The sociologist looks in upon an East Side class for defectives who come from the masses—criminal children, obviously anti-social—and criticizes the philanthropic effort that enables them to survive. He goes back again, six months later, and misses several of the most striking defectives. He learns that they are not in jail, but that they have passed on one, two, or three grades. He is told that the board of health physician removed some adenoids and enlarged tonsils, and that the Association for Improving the Condition of the Poor took these children to the country, gave them fresh air night and day, gave them plenty of milk, plenty of bread, and made them normal, healthy, and hopeful.

Does anyone believe that competition is less active after the former defective pushes upward in his class and fights for first place? How many potentially normal children are condemned, by not having their physical defects removed, to the rank of defectives? No one knows. In the schools of New York 100,000 have been examined and 66,000 have been found in need of medical, dental, and ocular care or better nourishment. If this percentage is representative, it means that 400,000 children in New York schools need similar attention not now given. It means that 100,000 others in parochial and private schools and on the street need attention. Finally, it means that there are today in the factories, shops, and stores of New York City hundreds of thousands struggling against physical handicaps, which prevent them from deriving benefit from their schooling in proportion to the time and money spent upon them. Probably similar conditions exist elsewhere. I remember that in a small village school in Minnesota half the pupils could not be considered either physically or mentally normal.

Dr. Wells asks for the endowment of sociological research. If I should offer each university represented in this audience \$10,000 or \$100,000, you would applaud my munificence. But let me suggest what will be worth infinitely more, and I shall not even claim the title of benefactor. A movement is now on foot to secure for the National Bureau of Education an appropriation to enable it, not only to stimulate 500,000 teachers, but to secure throughout the country

original reports, which, when compiled and published, will reveal sociological data infinitely more valuable than would be possible from any private endowment. Let the federal government prepare and circulate series of questions, for instance, covering such matters of biological and sociological importance as come directly under the teacher's observation. This would mean the ultimate accumulation of an invaluable mass of instructive data such as no private enterprise could properly undertake. Unfortunately, the Bureau of Education is one of the departments of the federal government for which it is almost impossible to get any appropriations. You can get nearly as much money as you want for improving harbors, and discovering better methods of farming, or for distributing seeds; but a request for a few hundred thousand dollars for the Bureau of Education would provoke a storm of objections.

For a generation interest in sociological work has been concentrated in private enterprises or directed toward books and guesses. Meanwhile the study of facts in the possession of schools, health departments, and the offices of government officials has been neglected. When a national children's bureau was proposed, no effort was made to enlist the aid and the interest of state, city, and county superintendents, teachers, and trustees, who are in personal contact with the raw material of the inquiry. Recently, when it was proposed to establish a new bureau with a chief investigator and a staff of clerks, the President expressed sympathetic interest in the proposal that this child-study be conducted by the National Bureau of Education; that the position of this bureau be redefined; that it be given a programme commensurate with its opportunities; that teachers throughout the country be notified that they shall be expected to take an intelligent interest in all the conditions affecting child-life. There is momentum enough in this room to secure such recognition of the National Bureau of Education by an adequate appropriation. When a laboratory of this kind is established, we may be sure that among sociologists, as among school children, the competition to survive will be more strenuous, because the conditions of competition will be more equal.

MRS. CHARLOTTE PERKINS GILMAN

In this discussion of population, as in the discussion of Professor Ross's paper on the birth-rate, we dare not lose sight of the fundamental biological law that fecundity is inversely proportionate to individuation. The members of the society who do its specializing and higher sorts of work are necessarily less fecund than the rank and file of the people. It is not necessary that these higher kinds of work should be done by everybody, any more than the higher organic functions of seeing, hearing, and smelling shall be done in the human body by all the organs alike. Only a part of society need be and can be eyes and ears; the rest is mere meat and bones.

Nor must it be assumed that rearing enormous families is a greater social service than that performed by those highly specialized individuals who contribute to progress and to the increase of stock of human science and art and literature. Shakespeare's great service was to enrich the world with his works, the works of his mind, and whether he had many children is a matter of minor consequence. Similarly, Mrs. Harriet Beecher Stowe wrote a great book. She had children

too—good children as children go—but her value to the world was through the book more than the children.

We should remember, when we see our modern women apparently unequal to the strain of specialized service and their personal functions also, that the trouble lies not in the specialization nor in the duties of wife and mother, but in the rudimentary conditions of our domestic economy, in the absurd and irrational organization of household life. There is no real reason why women should not be women, wives and mothers, and also members of society, performing that social service which is our first duty as human beings.

G. W. COOKE, WAKEFIELD, MASS.

I wish to call attention to the fact that natural selection must work in a different manner among men than among animals. When the gregarious life appears, when speech is developed, when man organizes political institutions, however simple and undifferentiated they may be, the selective process is considerably changed in its mode of operation. Then conflict is no longer to the same extent between individuals but groups, and the social process makes the application of the law of natural selection in a strict sense an impossibility. This modification of that law is too little recognized by evolutionists, and they are led astray.

It may be true that it is harmful to the group that the defective are kept alive, but there is no other way in which the higher social motives can be cultivated. The law of sympathy is as imperative as the law of selection, and it is even more essential to the group in its more advanced stages.

It may be possible to attain as large results by the method of eugenics as its advocates assert; but there is one phase of their proposal which I have not seen noticed adequately, if at all. Wonderful results are produced with horses by the strict application of the law of selection. Can the same methods be applied by men in producing a higher human breed? It is very certain that men and women will not submit to that absolute control which is exercised on horses. If no attention were given to individual wishes and preferences, and this is essential to the proposed results, men would rebel. That the selective process can be applied by individuals themselves with the purpose of bettering the race there is no evidence to prove. It is a fine assumption, but one that gives little promise of regenerative results.

To my mind it is also a radically false assumption that a higher class can be produced in society by the selective process as artificially applied by man, whether called eugenics or by any other name. After all that is claimed in regard to genius in certain families, the patent fact remains that in no recorded instance has such superiority continued beyond eight generations. Eugenics suggests in-and-in-breeding, at least so far as concerns the intellectual or aristocratic class in view. The effect is physical, and then resultant intellectual, degeneration, which at last destroys the continuity of generations given to genius. On the other hand, if the selected individuals come from a wider range in society, the result is to destroy the superior mental grade, though physical vigor may be retained. Therefore, the practical problem of individual control, so absolutely

essential in horse-breeding, has in no measure been met by the advocates of eugenics.

In so far as I have been able to see, the selective process must include the whole of the given society and all its classes. No society has ever yet been able to elevate a class far above the level of the mass, and to do it permanently. It may do this temporarily, but only by a constant incorporation of new life from the lower grades. In fact, the true eugenics must contemplate the problem of advancing all classes together and the practical abolition of all classes. With the advent of the theory of universal education a new phase of social advance has appeared. The selective process clearly fails to work where we theoretically assume it ought to be operative. Under the influence of universal education no class can advance in real force far beyond any other. So long as all doors of social advance can be kept open we must expect that the wage-earning class will show as much promise as any other. If it does not, it is from want of opportunity, not from lack of capacity. In that class today there is as much thoughtfulness, as much studiousness, as in any to be found in American society. Even more than this may be said, for this class shows an openness to the real problems of the world's growth shown by no other in the same degree.

What we need, then, is a real universalization of education, and the opening of opportunity to all. Any other selective process misses the mark, and grants to the privileged what they have not earned and do not deserve. Until these conditions are met any theory of eugenics is petty in its nature and must prove ineffective.

PROFESSOR E. A. ROSS, UNIVERSITY OF WISCONSIN

Strongly attracted as I am by the hopeful and noble views that have been expressed, I cannot but feel that Dr. Wells's is right. The theory that races are virtually equal in capacity leads to such monumental follies as lining the valleys of the South with the bones of half a million picked whites in order to improve the condition of four million unpicked blacks. I see no reason why races may not differ as much in moral and intellectual traits as obviously they do in bodily traits. Among those of the same race I think I detect great differences in capacity. Of course, the worth-grading of people is not to be identified for a moment with actual social rankings; but nevertheless they are there. In my classes, among students of equal opportunities, I am struck with the contrasts in character and in intellectual power. If such worth-differences exist, the recruiting of the stock from the worthier elements of a population is a supreme desideratum, and any practice that interferes with this presents a social problem. Consider the higher education and employment of women. A class of girls finishing a high school or normal are examined. Those that win high marks receive first-class certificates, get well placed, and are quite likely not to marry. Those with low marks find the extra-matrimonial path barred, and so nearly all marry and perpetuate their mediocrity. Is not this something to think about? Our girls used to marry men in order to reform them. I rejoice that this practice is passing away; for those who need reforming are probably less fitted for fatherhood than those who need it not. I am glad, also, that men of uncontrollable thirst are inexorably being eliminated from the more desirable

employments, and dropped to the rank of unskilled or casuals where they are little likely to mate or breed. On the man who is the victim of his own evil inclinations we squander much sympathy and effort that ought to be reserved for the worthier persons who are the victims of the evil inclinations of others. We war feebly against sin because so energetically against vice. As regards hell, there is something to be said for the open-door policy.

PROFESSOR WELLS

I do not wish to be understood as being opposed to a wise philanthropy, but as insisting that our philanthropy cannot safely overlook the biological consequences of its activities. It should not favor the multiplication of weaklings, or put degenerate and defective human beings in a position to propagate their kind. Nor am I opposed to the widest measures of popular education; but I do believe that we must modify our methods. We need more industrial and manual features, shorter hours, more playgrounds and gymnastics, fewer subjects and a shorter period of training. In time we may get back to the saner notions of the Greeks upon these subjects. I suppose we must submit to the higher education of women. It appears inevitable; but it seems to me not yet proven that this education should be the same in kind and amount as that afforded to men. Not identical educational environment, but one nicely adapted to natures and needs, appears to me to be a sound ideal. These natures and needs are physical in great part, and not purely intellectual, and cannot be neglected without damage to the individual, the nation, and the race.