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Progress!

THE word "progress" primarily signifies "a stepping forwards "-forwards not in relation to some real or imaginary goal the arrival at which we assume to be desirable, but merely in regard to the individual moving-in fact, a stepping "frontwards" as opposed to standing still or to stepping "backwards." In the course of the past few centuries it has, however, acquired a definite secondary limitation—that of the movement or development of human society towards a desirable goal-namely, earthly felicity, happiness, even perfection-or towards the attainment of perfect happiness in a future state of existence. The measure of "progress" thus necessarily has varied according to the conception of happinessabout which there have always been divergent opinions, and never an accepted definition. The philosophers of antiquity were pessimists: they did not entertain a belief in progress, but, on the contrary, held (with the notable exception of the Epicureans) that we are receding from a longpast golden age of happiness.

The notion of earthly progress was opposed by the Christian Church, which endeavoured to fix men's minds on a future state of rewards and punishments. A belief in the distribution of these by its intervention was the chief basis of the authority and power of the Church. The spirit of the Renaissance—the challenge to the authority of the ancients and of the Church, the emancipation of the natural man in the fields of art and of literature, and, later, in the sphere of philosophical thought—was accompanied by the development of the idea of progress. Ramus, a

mathematician, writes in the year 1569: "In one century we have seen a greater progress in men and works of learning than our ancestors had seen in the whole course of the previous fourteen centuries." The French historian, Jean Bodin, about the same time, reviewing the history of the world, was the first definitely to deny the degeneration of man, and comes (as Prof. Bury tells us in the fascinating book which we have used1 as the text of this article) nearer to the idea of progress than anyone before him. "He is," says Prof. Bury, "on the threshold." And then Prof. Bury proceeds to trace through the writings of successive generations of later philosophers and historians-such as Le Roy, Francis Bacon, Descartes, the founders of the Royal Society, and others, such as Leibnitz, Fontenelle, de Saint Pierre, Montesquieu, Voltaire, Turgot, Rousseau, Condorcet, Saint Simon, and Comte-the various forms which this idea of "progress" assumed, its expansions and restrictions, its rejection and its defence, until we come to the Great Exhibition of 1851, and, later still, to the new aspect given to the idea of progress by the doctrine of evolution and the theories of Darwin and of Spencer.

These chapters provide the reader with a valuable history of an important line of human thought. But the most interesting part to many of us must be the closing pages in which the actual state of the idea of progress as it appears in the light of evolution is sketched, and the questions are raised, which it has not been Prof. Bury's purpose to discuss, viz. Granted that there has been progress, in what does it consist? likely to continue? Does the doctrine of evolution, now so firmly established, lead us to suppose that "progress" will continue, and, if so, what will be its character? Or is it (however we define it) coming to an end? Will stagnation, or will decay and degeneration, as some suppose, necessarily follow? Or is "progress" (whatever one may mean by that word) a law of human nature?

The doctrine of the gradual evolution of the inorganic universe had already gained wide acceptance before the epoch when Darwin's "Origin of Species" brought man into the area of evolution, and established the accepted belief in the "progress" of man from an animal ancestry to the present phase of the more

^{1 &}quot;The Idea of Progress: An Inquiry into its Origin and Growth." By Prof. J. B. Bury. Pp. xv+377. (London: Macmillan and Co., Ltd., 1920.) Price 14s. net.

civilised races. It does not follow as a matter of course that such a development means the movement of man to a desirable goal. But (as Prof. Bury reminds us) Darwin, after pointing to the fact that all the living forms of life are lineal descendants of those which lived long before the Silurian epoch, argues that we may look with some confidence to a secure future of equally immeasurable length; and, further, that, as natural selection works solely by and for the good of each being, all corporeal and mental endowments will tend to progress towards perfection. Darwin was a convinced optimist.

Equally so was Spencer. According to him, change is the law of all things, and man is no exception to it. Humanity is indefinitely variable, and perfectibility is possible. All evil results from the non-adaptation of the organism to its conditions. In the present state of the world men suffer many evils, and this shows that their characters are not yet adjusted to the social state. Now the qualification requisite for the social state is that each individual shall have such desires only as may fully be satisfied without trenching upon the ability of others to obtain similar satisfaction. This qualification is not yet fulfilled, because civilised man retains some of the characteristics which were suitable for the conditions of his earlier predatory life. He needed one moral constitution for his primitive state; he requires quite another for his present state. The result is a process of adaptation which has been going on for a long time, and will go on for a long time to Civilisation represents the adaptations which have already been accomplished. Progress means the successive steps of the process. (There we have the scientific definition of human progress according to the apostle of evolution.) The ultimate development of the ideal man by this process (says Spencer) is logically certain—as certain as any conclusion in which we place the most implicit faith: for instance, that men will all die. Progress is thus held by Spencer to be not an accident, but a necessity. In order that the human race should enjoy the greatest amount of happiness, each member of the race should possess faculties enabling him to experience the highest enjoyment of life, yet in such a way as not to diminish the power of others to receive like satisfaction.

Let me say, in order to avoid misapprehension, that in what follows I am not citing Prof. Bury, but stating my own opinions and suggestions.

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It has been urged in opposition to the optimistic doctrine of Darwin and Spencer that it is a prominent fact of history that every great civilisation of the past progressed to a point at which, instead of advancing further, it stood still and declined. Arrest, decadence, decay, it is urged, have been the rule. This, however, is but the superficial view of the historian who limits his vision to the last four or five thousand years of man's development. It is not confirmed when we trace man from the flint-chippers of 500,000 years ago to the present day.

Naturalists are familiar with the phenomenon of degeneration in animal descent. Higher, more elaborate forms have sometimes given rise to simplified, dwindled lines of descent, specialised and suited to their peculiar environments. The occasional occurrence of such development in the direction of simplification and inferiority, and even the extinction of whole groups or branches of the genealogical tree of organisms, endowed with highly developed structural adaptations, and the survival of groups of extreme simplicity of structure, does not invalidate the truth of the conclusion as to a vast and predominating evolution -with increase of structure and capacity-of the whole stock of animal and vegetable organisms. A similar line of argument applies to the long and extended history of mankind.

The conclusion adverse to the reality of the evolutional progress of mankind which is held by those who declare that the ancient Greeks and other products of human evolution of like age had developed a degree of artistic execution and feeling, of devotion to intellectual veracity and ideal justice, to which more modern civilisation has not attained, is a fanciful exaggeration in which it pleases some enthusiasts to indulge. But an examination of the facts makes it abundantly clear that the conclusion is altogether erroneous.

Another attempt to discredit the belief in progress consists in an ambiguous use of the word "happiness" when it is declared that the teeming millions of China or even the herds of sheep browsing on our hill-sides are "happier" than the civilised peoples of Europe and America. Spencer's definition of the goal of human progress as determined by the general laws of organic evolution should lead in this discussion either to the abandonment of the use of the vague term "happiness," or to a critical examination of the state of feeling which it implies, and of the causes to which they are specifically related.

When we ask whether the conditions which have been the essential factors in human evolution and progress are still in operation and likely to operate for an indefinite period in the same direction, there is, it seems, in spite of the view as to their permanence held both by Spencer and by Darwin, room for doubt and for re-examination of the situation.

The struggle for existence, the natural selection thereby of favoured variations, and their transmission by physical heredity from parent to offspring, suffice to explain the evolution of man's bodily structure from that of preceding ape-like animals, and even to account for the development of man's brain to greatly increased size and efficiency. But a startling and most definite fact in this connection has to be considered and its significance appreciated. The fact to which I refer is that since prehistoric man, some hundred thousand years ago, attained the bodily structure which man to-day possesses, there has been no further development of that structure-measurable and of such quality as separates the animals nearest to man from one another. Yet man has shown enormous "progress" since that remote epoch. The brain and the mental faculties connected with it have become the dominant and only progressive, "evolving," attribute of man. And even in regard to the brain there is, since the inception of the new phase of development which we have now to consider, no increase of size, though were we able to compare the ultimate microscopic structure of the brains of earlier and later man we should almost certainly find an increased complexity in the minute structure of the later brain.

It seems to be the fact that-when once man had acquired and developed the power of communicating and receiving thought, by speech with his fellow-man (so as to establish, as it were, mental co-operation), and yet further of recording all human thought for the common use of both present and future generations, by drawing and writing (to be followed by printing)—a totally new factor in human evolution came into operation of such overwhelming power and efficiency as to supersede entirely the action of natural selection of favoured bodily variations of structure in the struggle for existence. Language provided the mechanism of thought. Recorded language-preserved and handed on from generation to generation as a thing external to man's body-became an ever-increasing gigantic heritage, independent of the mechanism of variation and of the survival

of favoured variations which had hitherto determined, the organic evolution of man as of his ancestry. The observation, thought, and tradition of humanity, thus independently accumulated, continually revised, and extended, have given to later men that directing impulse which we call the moral sense, that still, small voice of conscience, the voice of his father-men, as well as that knowledge and skill which we call science and art. These things are, and have been, of far greater service to man in his struggles with the destructive forces of Nature and with competitors of his own race than has been his strength of limb and jaw. Yet they are not "inborn" in man. The young of mankind enter upon the world with a mind which is a blank sheet of "educable" quality, upon which, by the care of his elders or by the direction of his own effort, more or less of the long results of time embodied in the Great Record, the chief heritage of humanity, may be inscribed. From this point of view it becomes clear that knowledge of "that which is," and primarily, knowledge of the Great Record, must be the most important factor in the future "Progress of Mankind." Thus one of the greatest services which man can render to his fellows is to add to the common heritage by making new knowledge of "that which is," whilst a no less important task is that of sifting truth from error, of establishing an unfailing devotion to veracity, and of promoting the prosperity of present and future generations of his race by facilitating, so far as lies within human power, the assimilation by all men of the chief treasures of human experience and thought.

The laws of this later "progress" are not, it would seem, those of man's earlier evolution. What they are, how this new progress is to be made more general and its continuance assured, what are the obstacles to it and how they are to be removed, are matters which have not yet been adequately studied. The infant science of psychology must eventually help us to a better understanding. Not only the reasoning intelligence, but also the driving power of emotion must be given due consideration. "Education" not only of the youth, but also of the babe and of the adult, must become the all-commanding interest of the community. Progress will cease, to a large extent, to be a blind outcome of natural selection; it will acquire new characteristics as the conscious purpose of rational man.

E. RAY LANKESTER.