

CHARLES DARWIN 452a AND KARL MARX:

A COMPARISON.

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Charles Darwin and Karl Marx: A Comparison



ROBABLY the two names connected with the nineteenth century by which that century will be best known to after centuries will be those of Darwin and Marx. Each of them in his own particular science—biology in the one case, economics in the other—made certain discoveries that not only revolutionised the particular science, but revolutionised the whole of

human thought and the whole of human life. A few notes will now be given upon their works, their generalisations, their lives, and their characters.

I.—WORKS.

It is, of course, impossible to do more than mention the chief of these. A description of them is altogether out of the question. Darwin's first book was The Naturalist's Voyage round the World. In 1831 Darwin, then a young man of twenty-two, went as naturalist on the Beagle for a five years' voyage. During that time he made a vast number of observations, and after his return to England he published a number of these in his first bookhis first "literary child" he calls it. This is one of the books that I always recommend when parents ask me what are the best books for boys and girls, and therefore also for children of a larger growth. Perhaps they so often ask me this question because I have no children of my own. The five I recommend are the Bible, the Pilgrim's Progress, Robinson Crusoe, The Naturalist's Voyage round the World, and Shakespeare. The first two need no comment. They are the most perfect specimens of English we have. Only the value and beauty of the first of them, the Bible, ought not to be discounted to the child by telling him that the Book is divine, when it is so beautifully human. Some may be astonished at the advice to place Shakespeare in the hands of young children. As one who has tried the experiment both upon himself as a child and upon other later children, I repeat the advice. You cannot bring children too early in contact with Shakespeare. You will say that they will not understand him. Do we? Some people will say that certain parts of Shakespeare are not desirable reading for the young. To the pure all things are pure. Personally I am always glad to think that I read Shakespeare and Den Quixote and Tom Jones and Roderick Random as a very small boy, and nothing but what was excellent in them made the slightest impression upon me.

Int. Instituut Soc. Geschiedenis Keizersgracht 264 Amsterdam-C. After the publication of *The Naturalist's Voyage* the next works dealt with geological subjects. They were the two volumes, *Geological Observations on Volcanic Islands*, *Geological Observations on South America* (now to be had in one volume), and the famous work on *Coral Reefs*. The first two contain a mass of facts and some very interesting speculations. The third enunciated the celebrated theory by which Darwin explains the origin and connection between the three forms of coral reefs known as the fringing reef, the barrier reef, the atoll. The theory was that the bed of the oceans in which corals are formed has been, and is, very slowly sinking. Although an alternative theory has been proposed and that of Darwin attacked with some vehemence, his theory still holds the field, at all events in relation to a very large number of cases.*

The books of Darwin cannot now be followed in chronological order. It is better to group them according to their subject. One group deals with botany. Into this book fall such works as the Fertilisation of Orchids, Climbing Plants, Insectivorous Plants, Cross and Self-fertilisation, the Different Forms of Flowers, Power of Movement in Plants. Each of them threw a flood of light upon botanical questions, and each of them contained a great number of original observations, and propounded new theories of the

utmost importance.

Four zoological works were written by Darwin. Three of them are exhaustive monographs of (I) the Cirripedia, barnacles and acorn shells; (2) the Fossil Lepadidæ, barnacles; (3) the Fossil Balanida, acorn shells. These works are monuments of patient investigation. Every one of the many different forms of barnacles and acorn shells of to-day was dissected—and the dissection is very difficult—and described. The barnacles and acorn shells of the past were described. Here, again, a flood of light is thrown upon the structure and habits of these animals. In fact, it has been said of these monographs and their writer, that had he written nothing else he would yet have been one of the most famous scientific men of the century. These are the only works of Darwin that cannot be read with much advantage by the general reader. They are, undoubtedly, too technical for him. But, with the exception of these, there is no single one of Darwin's books that cannot be read and understood, even by non-scientific people. Of course, the students of geology and biology will appreciate the work and the value of them better than others; but any person of average intelligence can read any book of Darwin's, except the Cirripedia volumes, and follow its contents without

The other zoological work was the last that he published. The Formation of Vegetable Mould through the Action of Worms. It is not a very large book, but it records a great number of most interesting experiments, and establishes certain generalisations as

to the relation between earthworms and the formation of the vegetable mould that plants delight in. I remember, in my youthful ignorance, asking Darwin why he dealt with animals so insignificant as worms. I shall not forget his reply, or the look that accompanied it. "I have been studying their habits for forty years."

Lastly must be mentioned the four works on Evolution. Of course, almost all his scientific works dealt with the problems of the origin and development of living things more or less directly, and with the solution of these problems by the theory of evolution. But the four works last to be mentioned were devoted especially to these great questions. The first was the celebrated Origin of Species. This was published in 1859 and proclaimed his discovery that the innumerable species of plants and animals have not been formed by so many acts of special creation, but have gradually developed or evolved out of preexisting forms. The year of publication, 1859, should be noted on account of a singular coincidence to be mentioned later. The Origin of Species was received with an outburst of indignation and execration. Many of the scientific men at first would have none of the new theory. The clergy of all denominations denounced it. The most ordinary writers in the newspapers, who had no qualifications whatever for dealing with the intricate and difficult subject, joined in the howl of denunciation and abuse. Everywhere, even in drawing-rooms, the book was discussed and condemned by people who had never read a line of it. I remember myself as a lad hearing a celebrated preacher cry aloud, "Believe in Darwin! Never! I haven't read a word of him."

And now what is the position of the book, or indeed what was its position as far back as 1870, when it had attained its majority? Recognised all over the world as a classic. Practically no scientific man of any repute in any country opposes its teaching. The scientific world has accepted that teaching and bases the whole of its method to-day upon it. The clergy have with a singular facility adopted the doctrines of the *Origin of Species* and tried to adapt them to their own theories. Only the most ignorant of them nowadays lift up their voices against Darwin. As to the general public, they naturally enough follow their leaders; and it would be difficult to find any person of average intelligence who at the present time would oppose the doctrine of evolution.

When the *Origin of Species* appeared one statement frequently made was that it was a rash work. The conclusions in it had been arrived at prematurely. The writer had been too hurried in coming to them. In fact, he was "a young man in a hurry." And how many years had Darwin been working and thinking before he published the book? In 1831 he set sail in the *Beagle*. In 1859 *The Origin* was published. Twenty-eight years. And some of us are ready to write pamphlets at a moment's notice. The publication would not have taken place even as early as 1859 but for the entreaties of his friends. His health, always

^{*} For an account of it, and, indeed, an account in detail of the whole of the works of Darwin, the reader is referred to my Student's Darwin, and for a summing up of the present position of coral reef theories, to The English Mechanic of August 30, 1895.

delicate, made them dread that he might pass away before he gave to the world his great discovery.

This fact disposes of another of the objections urged against the work. That not enough facts were given upon which the theory could be based. The reply to this objection was also furnished by the publication of Animals and Plants under Domestication. In these two large volumes Darwin gives an immense mass of observations by himself and others upon plants and animals that have come under the modifying influence of man; observations that formed the starting-point of his theory of the evolution of living things.

Even when the general theory began to be generally accepted the objection was made that it did not apply to man. Man has always been anxious to have a little world of his own, from which he can look down with conscious superiority upon his inferiors. The theory of evolution might hold for plants and the lower animals—but not for man. To which arrogance Darwin made answer in his publication of the *Descent of Man*. This, perhaps the most popular of all his works, contains the many facts that led him to the conclusion that the human race is not a special creation, but the result of development from lower forms. Since the time of the publication of the *Descent*, the evidence in favour of this view has immensely increased, and now there is, with perhaps one exception, no scientific man of any repute who does not accept this theory.

Lastly, the Expression of the Emotions. In this book the various ways of expressing emotion by the human race were studied and analysed. So were those of other animals, and it was shown that man's way of expressing anger, grief, joy, terror, and so forth, is founded upon certain simple anatomical and physiological facts, which were also observable in animals other than man.*

I turn now to the works of Marx. Placing on one side his many contributions to periodical literature in all languages, the first to be mentioned is (I give always the English translation) The Criticism of Political Economy. This contains the germ of the colossal and classic work Capital. Just as in the Origin of Species Darwin gave certain conclusions without in all cases giving all the facts upon which they are based, so in the Criticism Marx gives some idea of his economic conclusions. And as Darwin in the Animals and Plants under Domestication, the Descent of Man, the Expression of the Emotions, gave his facts and worked out more fully his theories, so Marx in the four volumes of Capital gave his facts and worked out his theories. A further resemblance between the Origin and the Criticism is in the date of their publication. Darwin's Origin of Species was published in 1859. Marx's Criticism of Political Economy was published in 1859. A singular fact that the two books which were to revolutionise the biology, the economics, the whole thought, the whole life, of the nineteenth century were both published in the same year. It was no accidental coinriestley in England, Lavoisier in France, and Scheele in Sweden. These things are not accidents. They are the result of the steady evolution of human thought. The development of chemistry up to the year 1774 had prepared the way for, had made the time ripe for, had necessitated, the discovery of oxygen. The development of biological science, the development of economic science, had in 1859 prepared the way for, had made the time ripe for, had necessitated, the discoveries of the two twin theories of evolution and

surplus value.

In 1867 the first volume of Capital was published in Germany. An English translation of it by the present writer and Mr. Justice Sam Moore, under the supervision of the late Frederick Engels, was published in 1887 by Messrs. Sonnenschein. By the same publishers in 1892 the Student's Marx by myself was issued. This is an attempt to give in brief the essential points in Volume I. of Capital. The second and third volumes are already published in German, and are in course of translation into English. It is well known to the students of Marx that a fourth volume was to complete the work, and every one of them must, in August, 1895, when they heard of the death of Engels, have had added to their sense of personal loss the shock of the idea that with his death the publication of the concluding volume would be impossible. They will be glad to hear that this impossibility does not exist. The manuscript of the fourth volume, in Marx's own handwriting, is in existence, is practically quite complete, and under the supervision of my dear friend and Engels' friend, Karl Kautsky, will be published soon in Germany. It is an immense relief and satisfaction to think that the monumental work of Marx will be presented to the world not as an incomplete statue, a torso, but in all its colossal proportions.

Moreover, there are several of the lesser writings of Marx published in German or French which, all being well, will soon appear in English: the Misery of Philosophy, the 18th Brumaire, Karl Vogt, e.g. One of these works, Revolution and Counter-Revolution, dealing with the events of 1848, is already published in English. It is a reprint of a series of letters written immediately after 1848 to The New York Tribune, throws a powerful light upon the causes and consequences of the great European movements of 1848, and is marked throughout by that singular, that almost terrible, insight through the outward seeming of political things to the real heart of them which distinguishes Marx. Another, on the Eastern Question and the Crimean War, is in course of publication.

II.—GENERALISATIONS.

There are five stages in scientific work: observation, experiment, recordal, reflection, generalisation. Through all these five stages Darwin and Marx, as scientific men, went. Darwin, as we have seen, observed and experimented upon plants and animals for twenty-eight years before he announced his great discovery. He recorded the results of these observations and experiments.

^{*} For a much fuller account of these four works on Evolution the reader is referred to my Darwin made Easy.

In his study at Down, besides the printed books, the microscopes, the pots and pans in which his experiments were going on, there were countless note-books containing the record of what he had observed, read of, and seen as the result of experiment. Upon this record he reflected, and as the result of his reflection made a generalisation, or rather a series of generalisations. This last and highest stage in scientific work is only reached by the highest. Many others can observe, experiment, record, and reflect. But only the rarer souls can generalise; that is, can draw out of the multitude of observed and recorded phenomena some one connecting, unifying principle, some golden thread linking together all the multitude of details and producing order out of chaos. These generalisations, these verbal expressions of some general principle running through a mass of individual facts, are often badly called "laws of nature." The misfortune of the name is that ordinary people think that there is something in common between a law of nature and a law of government or of society. Perhaps the only thing they have in common is the misleading name "law." A law of nature is a generalisation, i.e., the verbal expression of certain observed sequences or coincidences in natural phenomena. A law of society or of government is a decree promulgated by the society or the government to direct the conduct of human beings. Hence, only very loose thinking could give rise to the fallacy that a law of nature implies a law-giver. To avoid the possibility of that loose thinking it would be better to drop altogether the phrase "law of nature" and to use only the word "generalisation."

Marx also observed the phenomena of society and the economic facts of the past and the present. It can scarcely be said that he experimented. The position of the economist here is different from that of the biologist. The latter can experiment for himself; the former cannot. But fortunately history and society make the experiments for him. He has only to read the history of the past, the newspapers of the present, to find any number of experiments ready to his hand. The experiments of the Roman Empire, of serfdom and feudalism, of the discovery of America, of the foundation of the capitalist system, of how small an amount of food a human being can live upon, of stock exchanges, chartered companies, money market, cattle market, marriage market - all three very much alike. The economist records the results of his own immediate observations and of the experiments that history and society make for him. Then he reflects. And then he also generalises.

I have said that only the higher scientific minds can make generalisations. But there are certain generalisations that can only be made by the highest minds. I mean those that as a result of a study of evolution revolutionise not only one particular science, but the whole of human thought and life. These gigantic generalisations are rare. And they affect the very existence of humanity and its fundamental relations to the universe. Many very beautiful generalisations in science cannot

be of this order. The wonderful discovery of the Russian chemist Mendelejeff and the Englishman Newlands, the periodic law-i.e., that the physical and chemical properties of all the sixty odd chemical elements have a remarkable relation to the successive numbers representing the weights of these elements-is of this kind. Beautiful as the generalisation is, it does not affect the man in the street. So also with the coral reef theory of Darwin mentioned above. But every now and again the whole world is first shocked, then convinced, and afterwards revolutionised by some majestic outcome of human thought. The discovery of Copernicus that not the little insignificant earth but the sun was the centre of the solar system; the discovery of Galileo that instead of the sun going round the earth the earth went round the sun, were of this order. These two magnificent generalisations followed comparatively closely one upon the other. And since then there has been a pause, as if man were too exhausted to be ready for another or Nature was wisely waiting. Then came, as we have seen, quite close together, Darwin and Marx. Now, we have to see what were their generalisations which by way of evolution have revolutionised not only their own special science, but the whole of human thought and of human life.

Is there one special doctrine that Darwin has taught by which he will be especially remembered in the after ages? I think there is. Clearly it will not be any of those generalisations in geology or botany or zoology which, interesting as they are, only appeal fully to the trained mind. We must find something that appeals to the popular imagination and moves the popular heart. Probably most of my readers will at first sight think that this is the theory of Natural Selection or the survival of the fittest. Into that theory I cannot now go.*

But I do not select this as the most important of Darwin's theories: first, because, intrinsically excellent as it is, it is not the most important; and second, because, great as the weight to be attached to it was originally, and great as that weight still is, since the time of Darwin a number of other factors in the development of living beings have been discovered. Twenty-five years ago I should have said, and should have been obliged to say, that natural selection held the field practically alone in respect to the explanation of the origin of plants and animals. To-day I cannot say that. Several other ideas only second in importance to natural selection have to be considered along with it.

No; the theory by which I think Darwin will especially be known hereafter is that of evolution. He it was who finally and completely established for us this great principle of the continuity of phenomena. I know that before his time several great thinkers, from Laplace to Lamarck, had given some fore-shadowing of this idea. Not a few had vaguely, tentatively, in

^{*} It is fully explained in the Origin of Species and in my own two works, and is, indeed, now one of the commonplaces of ordinary thought.

an indefinite and dreamy way, hinted that there was in the nature of things a continual and unbroken developing or evolution of that which is, from that which was, into that which shall be-"as it was, is now, and evermore shall be." But until the time of Charles Darwin the popular, and in truth the scientific, conception of Nature was that all things were ordered and designed by some great power or powers from without; that there was a beginning of things in which matter and motion were created: that the various forms of matter and various forms of motion were superintended and interfered with from without, and that the final destructibility of matter and motion was conceivable. It was reserved for Darwin to tell us that these conceptions were inaccurate; that matter and motion are eternal, uncreatable, indestructible; that the phenomena of our universe, so far as we know, are continuous. By showing this in respect to the origin of plants and animals and the origin of man he led the human mind back to, and settled and solidified, the ideas that life itself is a development, that the earth itself is an offshoot from the sun, that the sun itself is a development from pre-existent matter, and that the whole solar system itself is also a development from pre-existent matter. He put the crowning-stone upon the edifice whose foundation-stone had been laid as far back as the time of the old Greek philosopher Heraclitus, when he said, "All things flow."

And now, is there one special doctrine that Marx has taught by which he will be especially remembered in the after ages? I think there is. With him as with Darwin there are a number of what we may call comparatively secondary generalisations; such as his definitions of labour power, of labour and work, of collective labour, of use value, value, exchange value. If I was asked which of all these generalisations is the most important, the one by which the name of Marx will be best remembered, I should say that of surplus value. I am aware that other economists before his time had had some feeling after this, just as other biologists before Darwin's time had had some feeling after evolution. But it was reserved for Marx to clearly define surplus value, to work it out in all its categories and thus to furnish us with a key to our modern social system just as evolution furnishes us with a key to our biological problems.

I have, however, in another place* given some explanation of the theory of surplus value. And so I prefer here to take another generalisation of Marx, ranking only second in importance to the former. I mean the materialistic conception of history. Strangely enough, and yet not strangely, Engels had, while apart from Marx, hit upon a similar idea. But he was always the very first to admit that Marx's explanation of it, and working out of it, were far in advance, as well as independent, of his. The materialistic conception of history is that the chief, the fundamental factor in the development of any nation, of any society, is the economic factor—

that is, the way in which the nation, or the society, produces and exchanges its commodities. According to this theory, if we wish to understand the history of Rome, of Spain, of England-if we wish to understand the social conditions obtaining in Rome, or Spain, or England at any given time-we must investigate the way in which the Romans, the Spaniards, the English produced and exchanged their goods. Note that all which Marx says is, that the economic factor is the fundamental one. This is necessary to notice, because so many of us, in our eagerness and enthusiasm, run away and run about with the notion that the economic is the only factor. Now, whilst it appears to be the fundamental one, there are others developed from it and reflexes of it, that also play their parts, acting and reacting upon their parent, the economic factor, and one another. The art, the science, the literature, the religion, the legal and juridical formulæ of a country, although they all spring directly from the economic conditions of the country, have to be reckoned with.

Many of our opponents hold that the teachings of Darwin and of Marx are antagonistic; that the theory of Natural Selection especially is in opposition to our opposition to Capitalism. I cannot here analyse this statement, which appears to me entirely inaccurate. I propose to do so in a future paper on Darwinism and Socialism. But as a student of Darwin some twenty-five years, and as a student of socialistic writings for many years, I may, perhaps, be permitted to say that there is absolutely no contradiction whatever between the two; that socialism is indeed the logical outcome of evolution, and that its strongest scientific support is derived from the teaching of Darwin. And I may here say that Marx, the most omnivorous of readers, knew the whole of the works of Darwin thoroughly. The converse did not hold; but I should like to quote a letter from Darwin to Marx, which appears to me very characteristic and very beautiful. In 1873 Marx sent to Darwin the second edition of the first volume of Das Kapital. He received in answer the following letter:-

"Dear Sir,—I thank you for the honour which you have done me by sending me your great work on Capital; and I heartily wish that I were more worthy to receive it, by understanding more of the deep and important subject of political economy. Though our studies have been so different, I believe that we both earnestly desire the extension of knowledge; and this, in the long-run, is sure to add to the happiness of mankind.

"I remain, dear Sir, yours faithfully,

III.—LIFE.

"CHARLES DARWIN."

I have no intention here to give any biography of either Darwin or Marx. Only a note or two upon their lives generally, and upon my own personal recollections of them. Darwin was born February 12th, 1809; he died April 19th, 1882. Marx was born May 5th, 1818; he died March 18th, 1883. Marx I only saw twice in my life, and once in his. The first time I saw him he was alive, the second time he was dead. A good many years

^{*} In my pamphlet on Socialism and Radicalism.

ago now, when I was quite a young man, I gave a lecture on "Insects and Flowers" at the Orphan Working School, Haverstock Hill, London. It was a fête-day at the school, and besides the children and their teachers a number of those interested in the school were present. As I was a young man of only one or two and twenty, I do not doubt that the lecture was a very bumptious, self-sufficient performance. After it was over a number of the visitors were introduced to me. I only remember three of them. One of the three was a not very tall, but very powerfully-built, man, with a tremendous leonine head, and the strongest and yet gentlest eyes I think I ever saw. The second was a lady of singular refinement and high-breeding. The third was a young girl. The man was Karl Marx. The woman was his wife, Jenny von Westphalen. The young girl is now my wife. I remember with what kindness and generosity Marx spoke to me. He spoke in very high terms, terms far too high, of the lecture, and prophesied all sorts of good things in the way of future work. It was really as if I were the teacher and he the learner. I fear that at that time I did not nearly properly estimate the inestimable value of such a criticism from such a man.

The next time I saw him he was lying dead on the simple bed at 45, Maitland Park Road, Haverstock Hill. I stood by

the side of his corpse, hand-in-hand with my wife.

As to Darwin, with him my immediate personal relations were fuller. As a young man I studied his works, and upon several occasions, when I met with difficulties I wrote to him and laid the difficulties before him. I am sure now that in most cases, if not in all, I ought to have worked out the difficulties for myself. Certainly I had no right to take up his time, which belonged not to me but to the whole world. Nevertheless, in every case I received from him a courteous and most helpful answer. Indeed, that has always been the way with the great men of genius. They are always so ready to help students. That was the way with Marx, as everyone that applied to him would bear witness, and that was the way with Darwin.

I never met the latter face to face until the year 1881. In September of that year a Conference of Freethinkers was held in London. One of the Presidents over the Conference was Dr. Ludwig Büchner, who is well known in Germany as one of the popularisers of the teachings of Darwin. Büchner expressed a wish to see Darwin. I wrote to the latter, and told him of this wish. A letter came back asking us both to pay him a visit and lunch with him. So on Wednesday, September 28th, 1881, Büchner and myself took train to Orpington in Kent, and drove four miles to the little village of Down, where Darwin lived. He met us on the threshold of his house. Here, again, was a man of commanding presence, although his health was fragile. He stood some six feet in height, and here, again, were the immensely powerful head, and the strong and yet gentle eyes. We lunched with him and some of his family. His wife was at the end of the table towards the large garden in which so many

of his experiments were carried on. We learned afterwards that she held strongly the orthodox views on all points. In fact, he explained to us later how he had experienced no little pain in publishing his scientific discoveries from the fact that the statement of them in some cases was liable to hurt those who were very near and dear to him. It may have been an accident, but the fact remains that, whilst Büchner was placed next to Darwin at table, between myself and Mrs. Darwin there was a clergyman of the Church of England. He was a broad-minded clergyman, and a most charming fellow; but there he was. Besides these, Francis Darwin, who assisted his father in his latest work, and his child were also present. At lunch the conversation was on scientific subjects. Afterwards, in his study, as he rested and smoked a cigarette, Darwin himself at once led the talk to religion. Now, although a man's views on speculative subjects have, in a sense, nothing to do with his scientific work and beliefs, either in biology or Socialism, it is always of interest to know what are the religious views of any great thinker. Darwin's first question to us was, "Why do you call yourselves Atheists, and say there is no God?" A question showing that, absorbed in his biological studies, he was not in touch with the controversies going on in the world outside, just as he was out of touch with the great conflict between Capital and Labour raging without his door. We explained to him that we were Atheists, but did not say there was no God. Only being unable to realise and believe in the idea of Deity, we were without God; neither asserting, however, nor denying His existence. We found that Darwin held the same opinion, only, as he put it, he called himself an Agnostic. Personally, I have always held that "Atheist" is only "Agnostic" writ aggressive, and "Agnostic" is only "Atheist" writ respectable. We found, upon further enquiry, that he was some forty years of age before he became an Agnostic. Asked why he gave up the Christian religion, he made the reply, "Because I found no evidence for it." And this, coming from perhaps the greatest and most careful weigher of evidence ever known, has its significance.

Marx was an avowed Atheist. And those who desire to know the scientific reasons for the materialism of Marx, Engels, Bebel, Liebknecht, Guesde, Lafargue, Adler, Plechanoff—in a word, of all the founders and teachers of scientific Socialism, should read the whole of the introduction written by Frederick Engels in 1892 to my translation of his Socialism, Scientific and

Utopian (Sonnenschein), and especially pages 9 to 18.

Thus far I have pointed out resemblances between these two great men. I have now to note one or two points of difference between them. Darwin had the good fortune to be a man of means. Marx was all his life a poor man. Darwin was born in the purple of wealth. He had never to trouble about breadand-cheese. He was saved from the carking cares that eat into life and make your best work impossible.

It was especially fortunate in the case of Darwin that he had

not to work for his living. That fragility of health to which I have already referred would almost certainly have prevented him from doing the wonderful work he did if a large part of his energies had been devoted to the earning of his livelihood.

On the other hand, Marx was to the day of his death, and at his death, a poor man. There are some wild superstitions still about in respect to the wealth of the International Working Men's Association, and of its great founder. The "International' often had not enough money to pay its postage-stamps. Marx. for the larger part of his life, knew what real poverty meant. He was not unacquainted with the interior of a pawnbroker's shop. He wrote much of the first volume of Das Kapital in a little room in Dean Street, Soho, nearly opposite the present Royalty Theatre, in which room his youngest daughter Eleanor was born. And he wrote much of it with his little children on his knees. His books were at first tabooed by the German publishers. It was with difficulty that anyone could be found to bring them out at all. During his lifetime they brought him in little or nothing. But, as is the way in this "mucky lump of a planet," as Mr. Yorke says in Shirley, after his death they became not only of scientific but of monetary value, and there is no difficulty now about getting a publisher for them either in Germany or in this country. When he died he left his children no other legacy than these works, the memory of "a good man that did good things," and an imperishable name.

Another difference between these two great geniuses is the place of their burial. Darwin lies in Westminster Abbey. Marx lies on the crowded hillside, in the London clay of Highgate. It is fitting enough that Darwin should be buried in Westminster Abbey. In that great mausoleum of the worthy and the unworthy he lies at least along with some of his peers. And, after all, it is fitting that Marx should lie in the Highgate clay, which reeks with innumerable dead. He lies there among the people. With him are buried his wife, and their beloved friend of many years, the peasant woman Helena Demuth—one of the finest and noblest natures I ever met. So, also, it is in keeping that the ashes of Engels were at his own request cast into the sea; the ashes of him who did more than any other, except his beloved friend Marx, to make the tide of human thought set towards the desired haven where man will rest.

Another difference between the two is that Marx was the more universal man. Darwin was a geologist and biologist pure and simple. He read with difficulty any other language than his own, and, as far as I know, spoke no language but English. He confessed to me personally that he had not read Shakespeare for many years. His letter already quoted shows that economic science was not studied by him. On the other hand, Marx read practically every European language, and wrote and spoke perfectly, English, French, and German. His knowledge of the general literature of all countries was immense. As for Shakespeare, he was "the god of his idolatry." He could say with Emerson,

"I am always happy to meet persons who perceive the transcendent superiority of Shakespeare over all other writers." He delighted in all forms of art, and was among the first to recognise "the transcendent superiority of Irving" over all other actors. He read deeply in all sciences; was thoroughly versed in the whole of the works of Darwin himself; has left notebooks crammed with notes upon chemistry; turned for relaxation to mathematics, in which, according to my friend Justice Sam Moore (no mean mathematician himself), Marx has made some remarkable discoveries. He had a sense in which Darwin appears to have been deficient-that of humour. Above all, in comparing them as differing, Marx was not only a philosopher, but a man of action. He was a practical revolutionist. He was, is, and for ever will be, the leader of the great practical revolt of the nineteenth century against the domination of capitalism. He was, is, and for ever will be, the leader of multitudes of men and women, many of whom will never read a line of his writings.

IV.—CHARACTER.

Indirectly, a great deal has already been said about the characters of Darwin and Marx. Their physical appearance was in harmony with those characters. Both were men of singularly commanding presence as well as personality. Their faces, even as only known to us by portraits, are full of remarkable strength and beauty. Compare, for example, the pictures of Darwin with, say, those of the various gentlemen who profess to satisfactorily reconcile the teachings of Darwin with those of the orthodox people. Or compare the head of Marx with, say, that of the present German Emperor. Head, eyes, body, manner, with both these men proclaim them kings among men; whilst the others possess only the ordinary characteristics of ordinary citizens.

In both Darwin and Marx there was that beautiful modesty without affectation characteristic of the highest minds. They had none of the affected mock modesty that you and I suffer from. And their moral character was on the same high level with their intellectual character. Truth, rectitude, purity, marked those characters. They both seemed to have an instinct for what is right in life as well as in science. Altogether two very beautiful natures. And therefore necessarily the subject of calumny and misrepresentation. Their critics were not content with attacking their theories. They assailed the men in their private characters. The foulest statements were made about the private lives of both men. And in the case of Marx at a time when no newspaper in Europe would open its columns to any refutation of the calumnies. However, Darwin and he lived it all down; and-this is rare—outlived it. Before their death the world knew them both, not as their intimates knew them, but as men of the very highest and most irreproachable moral character.

When we see the whole world of science accepting the doctrine of evolution as taught by Darwin, we are inclined to say, "If only he were alive to see it all." And when we see the whole

world of human life agitated by and slowly accepting the economic teachings of Marx, we are inclined to say, "If only he were alive to see it all." But they both knew. Great men of this order know perfectly well the result. We may note the pathos of the fact that the blind Homer never saw the faces of those to whom he recited the Iliad and the Odyssey; that Shakespeare never saw his woman characters played by women; that Beethoven in his later years never heard a note of the music he had created. But Homer knew that his poems would be read and loved all through the centuries. Shakespeare knew what Viola, Desdemona, Rosalind, Beatrice, Miranda, would be in the persons of women. Beethoven knew how his melodies and harmonies would stir the secret souls of men. And so Darwin knew what the scientific world would be for his teaching; and Marx knew that his name would for ever and for ever rank among the immortals and be treasured in the hearts of the people.

As one looks at these two men, at their lives, their works their generalisations, at the enormous effects that they have produced and will produce, at first something like a feeling of despair settles down upon us. By the side of these we are so infinitely little. But although it is not for us to think their high thoughts, and to make their discoveries, revolutionising human thought and human life, yet, after all, they only did the best that was in them. And we can at least do that. Let us end then on no note of despair, but with the resolve that we also with the best of our ability will do what lies in us. We can at all events study their teachings and try to make them known to others. Thus, in the words of Darwin to Marx, we can show that we also "earnestly desire the increase of knowledge, which is sure in the long-run to lead to the happiness of mankind."

By the same Author.

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