

**AUTOBIOGRAPHY
AND
SELECTED ESSAYS**

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Autobiography and Selected Essays by Thomas Henry Huxley

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THOMAS HENRY HUXLEY

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AND
SELECTED ESSAYS**

The Riverside Literature Series

**AUTOBIOGRAPHY AND
SELECTED ESSAYS**

BY

THOMAS HENRY HUXLEY

EDITED, WITH INTRODUCTION AND NOTES

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PREFACE

THE purpose of the following selections is to present to students of English a few of Huxley's representative essays. Some of these selections are complete; others are extracts. In the latter case, however, they are not extracts in the sense of being incomplete wholes, for each selection given will be found to have, in Aristotle's phrase, "a beginning, a middle, and an end." That they are complete in themselves, although only parts of whole essays, is due to the fact that Huxley, in order to make succeeding material clear, often prepares the way with a long and careful definition. Such is the nature of the extract *A Liberal Education*, in reality a definition to make distinct and forcible his ideas on the shortcomings of English schools. Such a definition, also, is *The Method of Scientific Investigation*.

The footnotes are those of the author. Other notes on the text have been included for the benefit of schools inadequately equipped with reference books. It is hoped, however, that the notes may be found not to be so numerous as to prevent the training of the student in a self-reliant and scholarly use of dictionaries and reference books; it is hoped, also, that they may serve to stimulate him to trace out for himself more completely any subject connected with the text in which he may feel a peculiar interest. It should be recognized that notes are of value only as they develop power to read intelligently. If unintelligently relied upon, they may even foster indifference and lazy mental habits.

I wish to express my obligation to Miss Flora Bridges, whose careful reading of the manuscript has been most helpful, and to Professor Clara F. Stevens, the head of the English Department at Mount Holyoke College, whose very practical aid made this volume possible.

A. L. F. S.

INTRODUCTION

I

THE LIFE OF HUXLEY

OF Huxley's life and of the forces which moulded his thought, the *Autobiography* gives some account; but many facts which are significant are slighted, and necessarily the later events of his life are omitted. To supplement the story as given by him is the purpose of this sketch. The facts for this account are gathered entirely from the *Life and Letters of Thomas Henry Huxley*, by his son. For a real acquaintance with Huxley, the student should consult this source for himself; he will count the reading of the *Life and Letters* among the rare pleasures which have come to him through books.

Thomas Henry Huxley was born on May 4, 1825. His autobiography gives a full account of his parents, his early boyhood, and his education. Of formal education, **Early education.** Huxley had little; but he had the richer schooling which nature and life give an eager mind. He read widely; he talked often with older people; he was always investigating the why of things. He kept a journal in which he noted thoughts gathered from books, and ideas on the causes of certain phenomena. In this journal he frequently wrote what he had done and had set himself to do in the way of increasing his knowledge. Self-conducted, also, was his later education at the Charing Cross Hospital. Here, like Stevenson in his university days, Huxley seemed to be idle, but in reality, he was always busy on his own private end. So constantly did he work over the microscope that the window at which he sat came to be dubbed by his fellow students "The Sign of the Head and Microscope." Moreover, in his regular courses at Charing Cross, he seems to have done work sufficiently notable to be recognized by several prizes and a gold medal.

Of his life after the completion of his medical course, of his search for work, of his appointment as assistant surgeon on board the *Rattlesnake*, and of his ^{Search} scientific work during the four years' cruise, ^{for work.} Huxley gives a vivid description in the autobiography. As a result of his investigations on this voyage, he published various essays which quickly secured for him a position in the scientific world as a naturalist of the first rank. A testimony of the value of this work was his election to membership in the Royal Society.

Although Huxley had now, at the age of twenty-six, won distinction in science, he soon discovered that it was not so easy to earn bread thereby. Nevertheless, to earn a living was most important if he were to accomplish the two objects which he had in view. He wished, in the first place, to marry Miss Henrietta Heathorn of Sydney, to whom he had become engaged when on the cruise with the *Rattlesnake*; his second object was to follow science as a profession. The struggle to find something connected with science which would pay was long and bitter; and only a resolute determination to win kept Huxley from abandoning it altogether. Uniform ill-luck met him everywhere. He has told in his autobiography of his troubles with the Admiralty in the endeavor to get his papers published, and of his failure there. He applied for a position to teach science in Toronto; being unsuccessful in this attempt, he applied successively for various professorships in the United Kingdom, and in this he was likewise unsuccessful. Some of his friends urged him to hold out, but others thought the fight an unequal one, and advised him to emigrate to Australia. He himself was tempted to practice medicine in Sydney; but to give up his purpose seemed to him like cowardice. On the other hand, to prolong the struggle indefinitely when he might quickly earn a living in other ways seemed like selfishness and an injustice to the woman to whom he had been for a long time engaged. Miss Heathorn, however, upheld him in his determination to pursue science; and his sister also, he writes, cheered him by her advice and encouragement to persist in the struggle.

Something of the man's heroic temper may be gathered from a letter which he wrote to Miss Heathorn when his affairs were darkest. "However painful our separation may be," he says, "the spectacle of a man who had given up the cherished purpose of his life . . . would, before long years were over our heads, be infinitely more painful." He declares that he is hemmed in by all sorts of difficulties. "Nevertheless the path has shown itself a fair one, neither more difficult nor less so than most paths in life in which a man of energy may hope to do much if he believes in himself, and is at peace within." Thus relieved in mind, he makes his decision in spite of adverse fate. "My course of life is taken, I will not leave London—I *will* make myself a name and a position as well as an income by some kind of pursuit connected with science which is the thing for which Nature has fitted me if she has ever fitted any one for anything."

But suddenly the long wait, the faith in self, were justified, and the turning point came. "There is always a Cape Horn in one's life that one either weathers or wrecks one's self on," he writes to his sister. "Thank God, I think I may say I have weathered mine—not without a good deal of damage to spars and rigging though, for it blew deuced hard on the other side." In 1854 a permanent **Lecture-ship.** lectureship was offered him at the Government School of Mines; also, a lectureship at St. Thomas' Hospital; and he was asked to give various other lecture courses. He thus found himself able to establish the home for which he had waited eight years. In July, 1855, he was married to Miss Heathorn.

The succeeding years from 1855 to 1860 were filled with various kinds of work connected with science: original investigation, printing of monographs, and establishing of natural history museums. His advice concerning local museums is interesting and characteristically expressed. "It [the local museum if properly arranged] will tell both natives and strangers exactly what they want to know, and possess great scientific interest and importance. Whereas the ordinary lumber-room of clubs from New Zealand,

Hindu idols, sharks' teeth, mangy monkeys, scorpions, and conch shells — who shall describe the weary inutility of it? It is really worse than nothing, because it leads the unwary to look for objects of science elsewhere than under their noses. What they want to know is that their 'America is here,' as Wilhelm Meister has it." During this period, also, he began his lectures to workingmen, calling them Peoples' Lectures. "*Popular lectures*," he said, "I hold to be an abomination unto the Lord." Workingmen attended these lectures in great numbers, and to them Huxley seemed to be always able to speak at his best. His purpose in giving these lectures should be expressed in his own words: "I want the working class to understand that Science and her ways are great facts for them — that physical virtue is the base of all other, and that they are to be clean and temperate and all the rest — not because fellows in black and white ties tell them so, but because there are plain and patent laws which they must obey 'under penalties.'"

Toward the close of 1859, Darwin's "*Origin of Species*" was published. It raised a great outcry in England; and Huxley immediately came forward as chief defender of the faith therein set forth. He took part in debates on this subject, the most famous of which was the one between himself and Bishop Wilberforce at Oxford. The Bishop concluded his speech by turning to Huxley and asking, "Was it through his grandfather or grandmother that he claimed descent from a monkey?" Huxley, as is reported by an eye-witness, "slowly and deliberately arose. A slight tall figure, stern and pale, very quiet and grave, he stood before us and spoke those tremendous words. . . . He was not ashamed to have a monkey for an ancestor; but he would be ashamed to be connected with a man who used great gifts to obscure the truth." Another story indicates the temper of that time. Carlyle, whose writing had strongly influenced Huxley, and whom Huxley had come to know, could not forgive him for his attitude toward evolution. One day, years after the publication of *Man's Place in Nature*, Huxley,

Attitude
toward
evolution.