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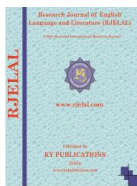
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## LITERATURE AND SCIENCE

Dr. R.P.PRADHAN

Associate Professor, Department of English, VSSD, College Kanpur

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### ABSTRACT

Apparently it seems that literature and Science are two fundamentally different activities of human mind but really it is not so. They are complementary to each other. Both arise as a consequence of curiosity. Literature is an outcome of imagination and curiosity whereas science is a product of experimentation and curiosity. The wild fantasy of writers often prompts the scientific society to search for the unknown. On the other hand, Literature makes scientific developments more popular through adaptation of various themes related with Science. The common ground between the scientist and the artist is that they, in the same way as mystic, are engaged with experience itself, the artist is attempting to express the experience in its own terms and the scientist is trying to see experience as a connected system.

**Keywords:** Literature, Science, Imagination, Emotion, Rational

Apparently Science and literature appear to be two different activities of the human mind but really they are not so. It is pointed out that science is the outcome of intellect while literature is the offspring of imagination and heart. "We care for literature primarily on account of its deep and lasting human significance. A great book grows directly out of life, in reading it, we are brought into large, close and fresh relations with life, and in that fact lies the final explanation of its power. Literature is a vital record of what men have seen in life, what they have experienced of it, what they have thought and felt about those aspects of it which have the most immediate and enduring interest for all of us. It is thus fundamentally an expression of life through the medium of language. Literature is composed of those books and of those books only, which, in the first place, by reason of their subject- matter and their mode of treating it, are of general human interest, and in which, in the second place, the element of form and the pleasure which form gives are to be regarded as essential"<sup>1</sup>. Man feels the urge of both imagination and intellect. Therefore,

literature and science are not conflicting elements. Their advocates may fight shy of each other but really science and literature are not antagonistic. Sometimes man is rational, again he is generous and sympathetic. Feelings and intellect both are the product of human mind. Therefore, a link may be discovered between literature and science.

Literature may be divided into two parts, the literature of knowledge and the literature of power. The function of the first is to teach and the function of the second is to move. "It is literature of the second class which is to be regarded as the proper object of literary criticism. It belongs to the domain of the Fine Arts. Poetry, drama and fiction, when treated artistically, cannot, like didactic literature, be proved right or wrong. They cannot be shaken by logic. They are subject to their own laws, which are apprehended in the last resort not by the discursive reason but by intuition, imagination, aesthetic sense. Both kinds of literature may be concerned with truth, but they arrive at it in different ways – the first by a judgment about it, the second by intuition. Few writers of the former class

are content – or indeed able – to confine themselves strictly to their didactic or scientific tasks. The eager scientist is constantly trembling with the excitement and imagination of the artist. The historian is compelled to lift his story above bare fact, to recreate and dramatize incident, reclose his persons and shape the setting in which he places them.”<sup>2</sup>

If literature is divorced of the elements of science, it is likely to become wild and licentious. In the same way if science loses touch with literature and humanity, it is likely to become inhuman and satanically. A balance must be established between reason and emotion, between intellect and feeling and between science and literature. There have been ages of literature in which emotion and imagination have flowed beyond the limit. A reaction has been started against the spirit of the age. The writers of the following generations have tried to curb the flight of imagination and emotion. This was the condition between Elizabethan literature and the Neo- classical literature and the metaphysical poets. The excess of imagination and the lack of science have always inspired the process of action and reaction.

Literature has always felt the impact of science. Galileo and Copernicus affected the course of literature during the 17<sup>th</sup> century. Newton affected it during the 18<sup>th</sup>. The spirit of science gave birth to rational literature. The 17<sup>th</sup> century literature is a product of scientific spirit. Its tone is very much realistic. Poetry has gone dry and prose is on the rise. Milton is an exception. He has been described as the last of the Elizabethans. Dryden and other writers have become more rational and scientific. Dryden became a member of the Royal Society which came into existence in 1660 during the period the Restoration. The purpose of the society was to propagate Science among the people. For that purpose it had to follow a plain and simple language. The writers were also affected by the mathematical plainness and precision of this style. The 17<sup>th</sup> century prose with the expectation of a few writers has been written in simple and direct style. The same spirit of Science affected the writers of 18<sup>th</sup> century also. Addison and Steele, Defoe and Swift write plain prose. Addison was a great admirer of science. Pope and Swift were hostile to science

but there were poets who paid tributes to Newton. Dr. Johnson in spite of his classical learning was guided by rationality and common sense which are important features of science

Some of the romantic poets like Blake repudiated the spirit of science. For Blake imagination is an important quality of human life. The romantic poets like Wordsworth, Shelley, and Keats believed in the primacy of imagination. Keats was strongly opposed to science. In his poem *Lamia* he wrote

Does not all charm fly  
At the mere touch of cold philosophy.

In Shelley’s poetry there is idea of progress and it is definitely a scientific thought. The Victorian age was an age of Science. In the sphere of natural Science, the figures of Charles Darwin J.H. Huxley and Herbert Spencer deserve mention. In medicine we have distinguished men like Pasteur and Lister. The material prosperity of England was solely due to the progress in science. The building of railroads, communication by telephone, telegraph and the wireless, the beginning of the automobile and of transportation by air facilitated the Industrial Revolution. Machinery, steam, and electricity revolutionized human outlook. Science was coming with its full force. There started a conflict between science and religion during the period. The traditional ways of thinking were changed. Darwin’s book completely upset the theological basis of the creation of the universe. Man was no longer the fallen angel described in The Bible. He had come into existence through the process of evolution. The Bible-Reading Victorian people were thrown into a state of confusion. They could not decide whether they should follow the Bible or they should follow the book of Darwin. They flocked to their representative poet Tennyson for the answer. Tennyson brought about a compromise between science and religion. It is known as the Victorian compromise. He advised them to welcome the new knowledge that comes from science. He further advised them to remain faithful to god. There should be union of mind and soul, intellect and faith,

Let knowledge grow from more to more,  
But more of reverence in us dwell,  
That mind and soul, according well,  
May make one music as before.

In his dramatic monologue *Ulysses* the poet welcomes the spirit of science. The Greek hero becomes the symbol of action, adventure, searching of new lands and acquiring of new knowledge his ideal is.

To follow knowledge, like a sinking star,  
Beyond the utmost bound of human  
thought.<sup>3</sup>

The poem is concluded with the four great Victorian ideals which are also the ideals of science:

To strive, to seek, to find and not to yield.

The Victorians must go on striving and searching new countries and new civilization in the world. They would never surrender to any power. Ulysses who has grown old does not want to take rest. He would go out into the world to discover new lands. Such spirit is expressive of science.

The growth of science affected the traditional religion and created a note of sadness among certain scholars. Arnold described himself as a man wandering between two worlds, the one dead and the other powerless to be born. The old world of religion appear to be dying and the new world of science had not taken its shape. He regretted the growing spirit of science and the gradual decaying of religion in his poem *Dover Beach*-

The sea of faith  
was once, too, at the full and round earth's  
shore  
Lay like the folds of a bright girdle furled,  
but now I only hear  
Its melancholy, long, withdrawing roar.<sup>4</sup>

In later years Arnold seemed to regain his faith and took shelter in literature that is poetry. He declared that poetry would be the religion of the future. He wrote, "More and more mankind will discover that they have to turn to poetry to interpret life for us, to console us, to sustain us. Without poetry, our science will appear incomplete and most of what

now passes with us for religion and philosophy will be replaced by poetry."

The 20<sup>th</sup> century makes a new attitude to science. Robert Bridges finds no conflict between science and literature. Science he believes, comforts man's animal poverty, leisure's his toil and humanizes manners and social temper. However, science has produced adverse effect on other writers. T.S.Eliot is a poet of disillusion and disillusion is the outcome of science. *The Waste Land* which came out in 1922 bears the impact of First World War in which scientific weapons had caused lot of destruction. Europe appears to be a waste land for the poet. Science has caused terrible loss of men and civilization.

I had not thought death had undone so  
many

The destructive spirit of science has generated a mood of depression and dejection Aldous Huxley in his novel *Brave New World* paints a dismal picture of civilization which is about to come. Everything in the world is mechanical and dehumanized. In his description mechanical men would be manufactured in laboratory and they serve the will of their manufactures. In the opinion of the novelist Science is silly and ugly. Throughout the novel we hear the cry for the old, simple earth, the love and affection, the old simplicity of life, the mothers and babies, the green vegetation and so on which science has ravaged. H.G. Wells wrote scientific fictions which are much optimistic some of them are scientific romances. *The Time Machine* is a new form of scientific romance. It is full of thrilling stories of scientific marvels. The stories are designed to show the potentialities of science. The book is an imaginative creation of the author. The time machine is pictured as a sort of motor bike on which one could travel back to the past and travel forward to the future. In the scientific romances of Wells there is full flowering of human imagination. Here science is no longer destructive of human imagination as it is commonly thought scientific novels have inspired new horizons of thought.

Russell, the modern philosopher, mathematician and thinker has embraced the spirit of science in his works. In his book *The Impact of*

*Science on Society* he writes about the good and bad effects of science. He shows the general affairs. He takes about the age of machine, the age of electricity and the age of atomic war which has threatened human existence on this earth. He also writes about the ugly effect of scientific technique in Oligarchy and in Democracy. In his last chapter he considers whether a scientific society is stable or not? The book is thought provoking and inspires the readers to think about the effect of science.

Ever since the days of Bacon, the father of modern science to the present age science has affected the nature of literature both in thought and in style. On the surface of thought it has given rise to rational literature. On the level of style it has created a simple, direct, precise and lucid style. The aphoristic style of Bacon is full of scientific spirit. It follows our economy of words. It is proverbial and axiomatic. It is well concentrated and concise. Russell has also created a mathematical style in the field of literature. It has got two important features. That which is long and round about must be written in a brief manner. The brevity of style must be very clear and not obscure. In this way science has contributed to a rational style in literature. It has also given it a rich content of thought.

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