Are Science and Art antithetical to each other?

POINTS TO DEVELOP

'Facts' are common to both science and art, but the 'reality' of the latter different from that of the former.

Difference in the matter of 'accuracy'.

Difference in approach or 'method'.

Scientific discoveries have spurred art into new perspectives.

Technology's use in techniques of art.

Has scientific Endeavour 'killed' the joy of art?

Science is not cold reason, and life has several planes of reality.

Science, from the word Sciatia which means 'knowledge', is supposed to concentrate on verifiable facts, reasoned arguments and firm conclusions, Art, on the other hand, is considered to be too closely linked with imagination, feelings and emotions to stand the test of reality, Facts certainly form the basis of any work of art. Poetry is a writer's response to reality, outer or inner; novels weave social details and or a human being. But the reality underlying art cannot be called the reality of fact. It is reality transformed by the colors of the imagination the permutations and combinations in the artist's mind, and given shape by the magic of words, paint or sound, reason not the chief motivation as in a scientific inquiry.

In yet another aspect science and art seem to diverge; the matter of accuracy. Science pursues accuracy with a single-minded zeal it aims at making its knowledge more and more approximate to truth, and in this effort constantly revises its repertoire of principles, formulae and theories. Art does not aim at that kind of accuracy. A work of art does not reveal all that kind of accuracy. A work of art does not reveal all that can be expressed about a subject. Essence is more important to art, enabling the reader, hearer or viewer to gather much more than what the mere words or paint depict on the surface. Aesthetic joy is not confined to superficial accuracy.

A scientist's method is different from that of an artist. Analysis- the breaking down of a phenomenon into its components – is basic to the scientist's way of trying to understand reality. Looking at a star, he cannot rest content wondering about what it is. He has to analyze its ingredients, and come to the triumphant conclusion

By the spectroscopic ken

I know that you are hydrogen.

The artist's method is different. He looks upon and collects bits and pieces of the outside world and experiences – a color from here, a whole which cannot be dismembered into its constituents. Of course, poems are 'analyzed', and paintings and musical compositions 'dissected' in order to be 'critically appreciated', but the enjoyment of a work of art lies in taking it as a whole. Are science and art then truly antithetical to one another? The gulf in attitude and approach may suggest that it is so. And yet, there are so many ways in which the two interact, so many points at which they meet. Many a great discovery of science has its roots in the same intuition and imagination that find expression in works of art. Reality is ultimately the subject of both science and art, only perspective may differ. Truth itself is no hard and fast single, dull entity. It is multi-faceted and is approached by divergent paths. If Keats found beauty and truth in a Grecian urn, Blake found eternity in a grain of sand, and Einstein found it all a matter of relativity.

It is a matter of interest that scientific interests and discoveries have spurred art to look for new perspectives in beauty. Newton's Optics seems to have sparked off innumerable color images in English poetry. Before the invention of photography, the landscape painter depicted with meticulous care what he saw in nature as it was; after photography took over this kind of depiction, art developed impressionism. The landscape was seen in terms of light and vivid tones of color. Psychological advances too have had an impact on art. If James Joyce used the 'stream of consciousness' techniques, the surrealism of Salvador Dali opened up entirely new possibilities in painting. Picasso's portraits are, indeed, considered as an attempt at space-time coordination in painting. Shades of Eintein! Today, computer graphics show how the artist's imagination can be combined with scientific and technological skill and precision to produce something totally new.

Technology has helped art in its various forms to reach the masses. The printing press – and now the desktop printer have multiplied the accessibility of common man to the written word. Radio has brought into the very homes to the written word. Radio has brought into the very homes the music of many lands. Television and cinema have created vivid forms of entertainment; indeed, the audio-visual media are justly art- forms in themselves. Science has created tools which the artist in the human mind learns to use with effect. The revolution in information technology has revolutionized the reach of art forms as well. And since information is a two –way process, the access to what is happening in remote places also has a suitable influence on artists' work.

Science with its cold clinical approach has killed the joy and wonders of life, say some. Not quite. True, with the spread of knowledge, one knows that the rainbow is merely light broken up into its spectrum, and that the moon is made of rocks, but that does not quite deaden our ability to enjoy words worth and Shelley. A poet could now rhapsodies over what a drop of blood looks like under a microscope or the distant star through a telescope and make a reader marvel afresh at the universe.

In any case those who reduce science to bare reason are doing it an injustice. The human mind which is responsible for creating a work of art is equally responsible for discovering laws of nature and universe. Neither can be done without the spirit of imagination. Science fiction exemplifies how the imagination creates worlds and events that science of the future renders into reality. Leonardo da Vinci not only painted the famous Mona Lisa but also drew models of flying machines. H.G. wells looked forward to man's landing on the moon. Asimov's robots are threatening to come alive. And the very recent successes at experiments in cloning found an artistic outlet in the creation of dinosaur clones on the screen, though most people would rather not have a Jurassic Park for real. The effect for that movie, incidentally, were created by the most sophisticated computers in conjunction with the human brain. What better illustration of the harmony of art and science could be there than the fact that some of our most reputed 'scientists' have been great 'artists' as well? Einstein was a good musician. Who can, in the circumstances, draw fine lines to demarcate the end of art and the beginning of science?

Life is a many –splendor entity, and reality has more than one plane. Art and science, far from being antithetical to one another, are part of the same reality. It needs a comprehensive vision to see them as parts of a whole; to compartmentalize then within narrow boundaries would be detrimental to human welfare. The head and the heart are equally important for a meaningful life.