

Mahatma Gandhi University
School of Gandhian Thought and Development Studies
Seminar course on
Search for Transcendent Meaning in Art, Science and Religion
Part - II (12.10.2018)

Lecture notes

(by Fr Dr K.M. George, Chairperson, PMG Chair, MGU).

•
Lecture II- "***Creativity in Arts and Sciences***"

Creativity is a unique characteristic of the human species. Animals and birds display special skills for the survival of their species, and they simply follow the congenital impulses to prepare their dwelling places, to find food and mates and to escape from their enemies. Human **creativity**, on the contrary, can produce ideas and things which did not exist previously. In Sanskrit the word *pratibha* denotes originality and creativity. It is defined as *apoorvavasthu nirmaana kshamata pratibha*- ability to create things which did not exist previously.

- Creativity is popularly associated with arts and literature. Making a painting or sculpture, writing a poem on a novel, performing a dance or a play are certainly creative acts. ~~so~~^{But} creativity can include all other domains of human activity from science and technology through medical and legal professions to the art of cooking and homemaking.
- The question has been raised by many whether art and science are separate domains of creativity unrelated to each other. Several research projects have been undertaken around this question. Tests involving prominent creative scientists and artists have been conducted. The general outcome of such enquiry is that there are close similarities between scientists and artists in their creative process. Harvard professor of biomedical engineering David Edwards says: "*One of the things that we have seen -we have done about 10 experiments now- is that in the heart of the process of these experiments, it's hard to know who is the artist and who is the scientist. It's a mutually creative and analytical and aesthetic*

process." He speaks about the cross-pollination between science and arts which has been going on for ages . It is only during the last few centuries that the academic world distinguished between science and arts. The idea of unified creativity has been abandoned in the rush for specialisation. Neuroscientists have examined if there is any neural basis for creativity in arts and sciences by using functional Magnetic Resonance Imaging (fMRI). They say that the findings do not support the notion that the artists and scientists represent "two cultures," as once stated by CP Snow.

- The ancient Greek word for art was *techne*. Of course, it embraced all domains of human art, science and technology then known to humanity. But now the word *technical* is far removed from any notion of art. Even in the early part of the last century universities granted Bachelor of Arts (B.A.) and Master of Arts (M.A) degrees to students of sciences like physics and mathematics. When you receive a doctoral degree even if your field is nanotechnology or biochemistry or genetics, you are made a PhD,-a Doctor of Philosophy. This comes from the old tradition that natural sciences were also part of philosophy, and every scientific discipline was considered as art.
- We must recognise that creativity is a process, and as such it continues to produce results. The resulting products are however different in different individuals and groups. The solution to a scientific problem is not the same as the solution to a social problem though the creative process behind both is more or less the same. Not all who go through this process arrive at the same tangible results even within a discipline. There are thousands of artists who take the pain and struggle characteristic of creative process, but only a few arrive at an accomplished and commonly recognised level. It is the same thing in science. Recognition, fame and wealth do not embrace every scientist. Dr ECG Sudarshan, well known theoretical physicist from Kottayam who passed away recently, was very aggrieved that the Nobel prize was never awarded to him though his name was proposed several

times. There may be irrational parameters like what we call luck operating in such cases.

- We need to acknowledge that no work of art is ever truly completed. No artist would express hundred percent satisfaction for any work that he or she does. I remember the well-known sculptor and artist Kanai Kunjiraman who did the giant *Akshara Silpam*, Letter Statue, in front of the Kottayam Public library, used to say that he wanted to come back and do the finishing work. But he would never be able to do that. For us the lovers of art the work is complete, but not for the artist. It is only an arbitrary ending of the work under many constraints. It's the same with a poem or a novel or a play. There is infinite possibility for improvement, but we seldom have time and space, will and resources to engage in an unending process. It's essentially the same in science or social sciences. We take up the project we work on it and then we wind up the work at some point under the constraint of lack of funding, shortage of time, unavailability of competent personnel et cetera. But research in human neurosciences, in artificial intelligence, in psychology or in health sciences will never end. If anybody concludes that all work on human intelligence had been completed what would he or she say in face of artificial intelligence and the vast universe of possibilities that opens up in cyberspace. Well, the incompleteness of a work of art or science is not necessarily a negative trait. It simply says that we are open to infinity in our artistic or scientific pursuits. Our horizon is infinitely receding. This is where I see the element of transcendence. A true artist or a scientist constantly transcends his or her own work, aspiring to the infinite.
- Let us assume that our world as we perceive it through our senses is a confined space without doors or windows. If that space or room where we stand is really very large we do not normally see the high walls around without any opening. Only those people, particularly highly sensitive artists and genuine scientists who tirelessly pursue the horizon of knowledge, will know that we are incarcerated in a tightly closed but deceptively spacious

ground . So the artists and scientist take upon themselves the task of cutting windows and doors on these hard and bleak walls. Every work of art and every insight into the nature of reality and every discovery of the working of the universe are all openings to another world, to new universes of infinite dimensions.

- The great mystery it seems, is the source of inspiration to artists, scientists and persons of remarkable creative achievements in any domain. The ancient cultures attributed inspiration to divine beings like the Muse in Graeco-Roman tradition or the goddess Saraswati in India. Apart from such mythical attributions, we cannot spell out any neuro-scientific or psychological basis for the experience of inspiration. But it links mystics, artists, poets, inventive scientists and any creative person in any field. However, one should be able to discern the demonic and destructive potential for human creativity, as we see today that good and useful software is always accompanied by malware of destructive proportions. This enigma points to the ambiguity of creativity and the need for proper ethical and spiritual discernment.