



A CRITICAL STUDY OF THE PERCEPTION OF NANOTECHNOLOGY IN POST- MODERN SCIENCE FICTION

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- **Abstract-**

The present study is modest attempt to explore the emerging trends of nanotechnology and it's perception in post-modern literature. Nanotechnology is recent development in the post-modern scientific era. Literature is an expression of dynamic social life. It portrays how technology helps to bring material prosperity to the human being but sometimes it works as double edged sword. It discusses whether technology is bane or boon by illustrating the texts which exhibits the perception of the nanotechnology. It looks into the substance which is applied by the writers to depict the growth and development of nanoscience in which the perception of nanotechnology is imagined and post-modern science fiction. It discusses origin and development of nanotechnology and it's application at the very minor level which exhibits the human progress but simultaneously it creates the issue of human existence. It discusses emerging class of writers those who were inspired by the technological inventions and how they have projected the near future. It focuses on reciprocity between the world which is existed and the world which is yet to be exist. It deals with the impetus given by popular culture to the perception of nano-science in literature. It delves into how literature depicts the cultural and material world and it's outcomes. It discusses how scientific development is requirement of dynamic social issues. The present study analyzes the different dimensions of emerging technology and its application in near future. Literature depicts the human pathos in concern with the use of innovative technology. It points out the possessive and possessed nature of human being because of dependency on emerging technology. The portrayal of emerging technology discusses near future of the human being.

[Key Words- Nano-science, Technology, Science, Perception etc.]

Introduction:

Postmodern Science fiction is an outcome of earlier detective stories. It is to be considered as the independent genre of literature. Science is systematic body of knowledge which establishes its new principles but literature has existed since the time of human existence. In earlier phase of evolution science discovered new natural laws and literature depicted the human progress and its impact on the society. Literature was in both form viz. Oral and written. Now day's written form has got immense importance and it has become valuable evidence of human progress. The same is reflected in the literature. It may be cyberpunk literature or it maybe nano punk literature or it may be bio-punk literature everything has been covered in the post-modern science fiction. Nano-science is not an exception, it has depicted in the science fiction. The present study will focus on the perception of nano-science in post -modern literature. According to John Rider "nature of Science fiction is historical and mutable, it doesn't have essence ,no unique features and it as no origin, science fiction is not set of texts, but it is way of using texts and drawing relationship among them" (Baker, 2010,-159).

In post-modern science fiction the fictionalization of everyday life creates new avenues for the perception of the writers. It deals with imaginative representations of technology which gives impetus to material history of technological development. The technological development signifies the progress of the society; simultaneously it confines the earlier phase of human progress. Literature depicts the earlier phase as well as progressive era of human beings. Literature ceaselessly depicts the human values which are attached to the material prosperity by adopting emerging technology such as nano-science. This study deals with the perception of writers in concern with nano-science technology in the post-modern science fiction. This study discusses how the perception of technology gets attached with the world of creativity.

Literature Review

To discuss the perception of modern emerging technology in post-modern science fiction, study takes reviews on the development of science fiction examined by various critics and pioneers in literature. Post-modern science fiction is an offshoot of earlier detective stories and dystopian tales. Roger Luckhurts points out in his essay "The Many Deaths of Science Fiction" that SF legitimates itself in three ways by the implementation of the borders; by a certain narrative of its glorious history; by appealing to the rigor of the scientific.

Gilgamesh is supposed to be the initial source of science fiction through which the earlier science fiction was emerged. The major theorists Tzvetan Todorov, Darko Suvin, Christine Brooke-Rose, Adam Roberts and Roger Luckhurst were supposed to the first wave science fiction writers those who gave the perception of emerging technology in post modern science fiction. Many writers and critics like Brian W. Aldiss, Thomad M. Disch and John Clute theorized science fiction's origins, development and generic features. The scenario of science fiction writing was shifted from criticism to magazine reviews, from writer's as-critics to writer critics such as James Blish J.G .Ballard and Philip K Dick. The next generation of science fiction dealt with scientific romance and the perceptions of authors such as the narratives in empire, legacies for later British science fiction. The writers like H. G. Wells, I. F. Clarke and Rob Latham.

Some critics argue that there is influence of utopian and dystopian writing on science fiction. Marxist science fiction also influences on the post modern science fiction and material possessive nature of human being which has reflected in SF. The critics like Pierre Macherey, Ruth Levitas, Mark Bould and China Mieville are supposed to be the pioneers in literature. In recent development of science fiction Cyberpunk, Bio-punk and Nano-punk are new emerged trends of modern genre of SF. The perception of these trends in post -modern SF have not studied in profound, so the study is modest attempt to focus on the constituents of nano-science it's perception in literature to fill the gap of early SF and emerging trend

Theoretical Discussion on the Perception of Nanotechnology in Post-modern Science Fiction:

Nanotechnology is recent development in the realm of emerging technology. It occupies major place in the era of globalization. The term nanotechnology implies the application of technology at the nano-metric (small) level. The nano is derived from the Greek word nanos which means short man. It signifies scalar size in the metric system. It is applied to measure billionth of the base unit. The term nanotechnology was first deployed by research scholar Norio Taniguchi in his research document a "Study on the Basic Concepts of Nanotechnology". He applied this term to describe emerging technology in the form of nano-metric level. We find the seeds of the emerging nano science technology in the speech of Richard Feynman, a research scholar at CIT (California Institute of Technology, he described that there's plenty of Room at the bottom. It gives general fact about the principles of miniature nature emerging technology which we call nano science. K. Eric Drexler's book "Engines of Creation: The Coming Era of Nanotechnology is foundational text of post modern science fiction.

"It is to be considered that the concept seems to have evolved from much older works of literature, such as "Waldo" a short story which was published in 1942 by Robert Heinlein" (Vargolici,Stefan.p-39). The perception of nanotechnology was derived from the in popular culture and science fiction of the last two decades of the 20th century. SF reflects emerging technological trends of contemporary age by creating narratives to investigate the restrictions of emerging technologies. The present study explores the perception of nanotechnology in order to depict the social impact of emerging technology. After the cyberpunk and Bio-punk genre of SF the new genre of SF came into existence which is known as Nanopunk. Nanopunk perception in SF reflects the social and ethical impacts of emerging technology.

Though the post-modern science fiction genre has undergone various nomenclatures, nanoscience occupies important place in this era. The post-modern SF discusses the adverse impact on the human beings. There are outstanding works of SF which contain near future of the world and dangers of nanotechnology. In this connection we will discuss the novels of Greg Bear, Neal Stephenson and James Halperin. These three writers deal with the adverse effect of nanotechnology.

Greg Bear is post-modern science fiction writer. He wrote a tale *Blood Music* which is considered as foundational literary text in the realm of post-modern science fiction. It contains perception of nanotechnology which is not obvious in this story. The story is woven round the character of Edward who is Obstetrician gynecologist. He is narrator of the story. He meets with another character Virgil Ulam who is scientist at Corporate Nanotech Laboratory and he is busy in the creation of artificial intelligence cell. This

project is based on an organic microcomputers or medically applicable bio-chips. He develops this cell without prior permission of authority. When authority comes to about his project, they decide to destroy it. To resolve this issue Ulam injects the biochips so that he can carry them out of the laboratory. The cells get evolved and start to communicate and assemble themselves in to collective civilization that perceives Ulam as their universe, their God. The cells get more active ad they come to know that their creator is not the universe, so they get divided and start multiplying and engulfing in their path to accommodate their own agenda. Though the title of the novel is bizarre, it is very suggestive, symbolic and establishes the near future of human being. It epitomizes the dangers of the advancements of modern science. It predicts the global changes which will occur due to the possessive nature of human being to get the material prosperity.

"The Diamond Age" is another novel by Neal Stephenson which gives perception of nanotechnology. The substance of novel deals with near future of nanotechnology. The plot of the novel is woven round the community of Vickys'. They monitor their masses by the encrypted network of nanotechnology. John Perceival Hackworth is central character who is hired by Vicky to prepare a book that will educate his granddaughter and make her worldly wise. Hackworth delivers the task by violating the ethics of his tribal community with creation of duplicate book. He violates by stealing duplicate book. Nell granddaughter of Vicky learns everything about the world in which she was staying. She gets infatuated with human counterpart of the book which becomes everything for her. Meanwhile, Hackworth is expelled from his tribal community and the people enforce him to live with drummers. It becomes very difficult to Hackworth to monitor nano construction programming issues. The tribal people protest to replace the feed system by seed system. Nell's approach to seed system enforces her for subrogation. She determines to do that deed as part of her work. Furthermore, Nell enters in the world of drummers. She makes efforts to save surrogate mother by protesting the closing of the counter technology. She protests the Vickys'. She considers seed technology as an oppressive, Though it assures freedom and emerges from the value of confirmation.

The nanotechnology imagined in *The Diamond Age* focuses on merits of emerging nanoscience technology. It discusses the feed as well as seed system. It portrays the nanodystopian world which has emerged from monopoly of emerging technology. It discusses the grand truth that if the technology developed in positive manner, it can be controlled by human being. It focuses on optimistic view on emerging technology.

James Happerin novel, *The First Immortal* portrays well monitored and positive nanotechnology in near future where death can be avoided and biological immortality can be existed. It is achieved by the evolution of cryonics technology through which the human body can be retained at very low temperatures for long span of time still the medicine is developed enough to resurrect it and resolve its medical condition. The story is centered on Benjamin Franklin's Smith. He suffers from heart attack in 1988. It makes his death inevitable. He thinks to apply cryogenic technology to frozen his body and he hopes that as the advancement of medical science will exist his heart will be repaired and body will be brought back to life. His grandson Trip Crane, a scientist develops technology which allows frozen bodies to be brought back life. The

technology invented by Trip Crane also repairs and improves healthier and younger. Trip decides to freeze the body of his grandfather Smith. He does so for more than eighty years of span. Benjamin Franklin gets survives and gets reunite with the members of his family by celebrating 200th birthday. The text concludes with Smith's family celebration of his two hundredth birthday. Halperin presents very optimistic view on upcoming emerging technology. The study discusses the perception of nanotechnology in literary world of Post-Modern science fiction.

❖ Conclusions -

The present study sought to analyze the perception of emerging technology in the post-modern science fiction. It discusses the possessed and possessive world of modern emerging technology such as nanotechnology .It discusses the issue of human existence by the application of modern nano technology. It illustrates the perception of nanotechnology in SF writers like Neal Stephenson, James Harlperin and Greg Bear.

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