Cybernetics and Human Intelligence: A Case Study of *the Variable Man* by *Philip K. Dick*

Qasim Ali Kharal[1], Iftikhar Ahmad[2]

[1]Lecturer, Department of English, University of Sialkot, Email: qasimalikharal1@gmail.com

[2] MS English Literature Scholar, University of Sialkot, Sialkot

Abstract

The paper tries to show the line of demarcation between man and posthuman with regards to their intellect and bodily simulation. Man is man; machine can't replace him. Robots, cyborgs and ultrasonic technological artifact can't be a substitute to human intellect. Human intellect can be transferred and downloaded like some data but human consciousness is something unique and non-transferable. The novel *The Variable Man* by Philip K.Dick has been exploited to prove the point. Hayles's (1999) theory of Posthuman helps to probe the issue of the new form of human identity titled as posthuman. The research shows that technology is becoming the subject by turning man into an object which is called posthuman by Hayles. She provides a detailed theoretical discussion on the issue of cybernetic identities and the complexities of being posthuman. The research implicates whatever the development may be there in the field of robot technology and cyborgs, human power of reasoning and consciousness are still unsurpassable.

Key Words: cybernetic, cyborg, intellect, man, posthuman

Introduction

Thomas Cole, known as *The Variable Man* belongs to 1913, an age "*The early part of the twentieth century. Before the wars began. That was a unique period. There was a certain vitality, a certain ability. It was a period of incredible growth and discovery. Edison. Pasteur. Burbank. The Wright brothers. Inventions and machines. People had an uncanny ability with machines. A kind of intuition about machines—which we don't have.*"

Thomas has been imported through a time machine into the year 2136. The novella starts with the statement about him *as, "He fixed things—clocks, refrigerators, vidsenders and destinies. But he had no business in the future, where the calculators could not handle him. He was Earth's only hope—and its sure failure!*"

These above given two extracts from the text *The Variable Man* unfold the historical difference of the years 1913 and 2136. The year 1913, as stated by Hayles is very typical in the sense as the cyborg appeared as technological artifact and cultural icons particularly in the days after World Wars I and II. The human consciousness was viewed as an entity that may be manipulated, managed and shifted in the form of robots. The war years in the human history accelerated the process of conversion of man into posthuman. Thomas Cole who can *fix* all sort of things is as he has a *kind of intuition about machines* but the Terran cybrogs and mechanics helplessly pronounce '*which we don't have'.* They don't possess that individual and creative self as they have lost such traits during the war years like the lost Generation of Hemingway that lost the aesthetic sense during the war days.

Background of the Study

Human issue of identity crisis and identity retention have been important issues in every phase of human history. The idea of identity crisis as a political issue emerges in the 19th c in the form of colonialism. The colonial empire tries its best to distort the identity of the colonized ones. The turn comes when the colonized territories dare to write back to the Centre and manage to re-establish their defaced identities. The things go on and the world takes another turn in the form of scientific fiction with the rise of technology. The things start moving from epistemological to ontological level and information/data replace knowledge. The boundaries between the knowledge and information start to blur and a postmodern trend starts where Jean-Francois Lyotard (1979) claims that knowledge is now the world's most significant commodity, and that it may well become a source of conflict between nations in future. Whoever controls knowledge now exerts political control. Here Lyotard's focus of knowledge in the postmodern context is surely the information and the range of data an individual or a nation may possess.

Hayles, (1999:1) in her book *How We Became Posthuman*, refers Moravec (1988) who claims that in the very near future we will be able to download human consciousness like some computer file. This view is appealing in its own way but Hayles differs Moravec by saying that the mind as a system can be seen as antihuman, it is not inevitably the death of humanity, but just the death of a certain way of seeing the human. The ideas of posthumanism do not see the machine as substituting the human but as an assistance designed to perform our desired options and commands that no more expected have to be performed by humans. We have already designed intelligent-agent programs which sort unwanted emails and messages as per our priority and choices. (Hayles 1999:287). Here she takes the human mind as a circulating coin of knowledge separated from the body, as *"union of the human with the intelligent machine"* (Hayles, 1999: 2). As a posthumanist, she views consciousness as an additional process of the cognitive capacity, rather that the most important aspect when it comes to identity. In other words, the human being is an entity that can easily be united with intelligent machines:

I*n the posthuman, there are no essential differences or absolute*
demarcations between bodily existence and computer simulation, cybernetic
mechanism and biological organism, robot teleology and human goals.

                                                                                   *(*Hayles, 1999, P. 3)

Hayles (1999: 284) implies that posthumanism proposes us an opening to refigure the body. She affirms time and again by saying that human beings are first of all embodied being, and the complexities of their embodiment prove that human consciousness unfolds quite differently from cybernetic equipment. To tell the significance of the body, Hayles proves that it is nearly fancy to think that the consequence of thousands of years of evolution (the body) would not affect human behavior and action. Although humans can work jointly with machines or, for regular tasks, even be substituted by them, this does not mean that humans can be easily replaced by machines as equals.

Secondly, she also differs from Foucault's (1977) view, for which discourse is more than just language, and nothing is outside discourse. The body is at the mercy of the discursive system. Hayles (1999: 200) takes her stance by saying that this embodiment and the body's aptitudes are outside discourse in so far that they cannot just be reduced to signs: "*Habit is knowledge and a remembering in the hands of the body; and in the cultivation of habit, it is our body which understands"*. Important here is the fact that this states to knowledge we do not know we have: A type of subconscious knowing. Because this embodied knowledge is not conscious and because it cannot be definitely form into signs, it is impossible to transfer this part of human behavior to a machine as seamlessly as Moravec and Foucault believe. Embodiment, as a performative and individual experience, is an important aspect that puts a human being apart from machine or computer.

The comparison of the *Terran* people with Thomas Cole in *The Variable Man* by *Philip K. Dick* can prove the Hayle's point of view that machines and computers can't replace human behavior, consciousness and rationality.

Statement of the Problem
"Several important factors are involved in the current condition of the issues with "Cybernetics and Human Intelligence named as followed:

Literary Analysis Gap: Even while cybernetics and its effects on human intelligence are becoming more and more popular, there isn't much information available about how it is specifically applied in science fiction, except in books like Philip K. Dick's "The Variable Man."

Interdisciplinary Exploration: The intersection of cybernetics and human intelligence presents a rich area for interdisciplinary exploration, yet there is a lack of comprehensive studies that bridge the fields of literature, cybernetics, and cognitive science to analyze how these concepts intersect and inform each other within the narrative structure of science fiction literature.

Techno-socio-cultural Implications: The novel raises questions about the socio-cultural implications of cybernetic advancements and their impact on human intelligence, agency, and societal structures. However, there is a need to delve deeper into these themes and examine how they reflect and influence contemporary perceptions of technology and human cognition.

Authorial Intent and Interpretation: Comprehending Philip K. Dick's rationale for integrating cybernetic elements in *The Variable Man* necessitates a careful reading of the novel as well as an evaluation of the author's larger body of work. It is important to investigate how Dick's concerns about technology and its possible effects on humans are reflected in the novel's depiction of cybernetics.

Contemporary Relevance: In view of the quick advances in artificial intelligence and technology that have occurred since the release of *The Variable Man*, it is imperative that the themes of the book be reexamined in light of recent advancements in these fields as well as societal discussions about the ethical implications of AI and automation. To tackle these issues, a thorough investigation is needed, integrating literary analysis, cybernetics theory, and perspectives from cognitive science and sociology. This will yield an all-encompassing comprehension of the intricate interplay between cybernetics and human intelligence, as portrayed in Philip K. Dick's *The Variable Man.*

Objectives of the Research
To conduct a comprehensive analysis of the cybernetic elements present in *The Variable Man* through close reading and literary analysis.
To explore the narrative strategies employed by Philip K. Dick in depicting the interaction between cybernetic systems and human intelligence within the context of the novel.
To investigate the historical and cultural context surrounding the publication of *The Variable Man* and its relevance to contemporary debates on technology, artificial intelligence, and human autonomy.

Research Questions
How does Philip K. Dick employ cybernetic concepts and themes in his novel *The Variable Man*?
What are the implications of the integration of cybernetics on human intelligence and societal structures within the narrative framework of the novel?

How does the portrayal of cybernetics in *The Variable Man* reflect contemporary anxieties and perceptions regarding technology, artificial intelligence, and human agency?

Delimitations
Human knowledge and consciousness are unpredictable in some predictable situation while a machine's mechanism in predictable in every situation. This research proves the idea of man's identity shift in the postmodern world. **Firstly**, the posthuman has dominance of information patterns on his intellect and bodily existence. Reinhart and Dixon can predict even future and destinies with the help of their data stored in their supersonic computers. **Secondly**, the posthuman view proves that consciousness is replaced with mind and mind is executable entity like some computer file. He is machine readable and is controllable by computer like a cyborg (cybernetic organism). The *Terran* system can scan each and every individual as it has stored information about every instinct of man and hence man can be executed accordingly. It is only *The Variable Man* (from 1913) who has exemption. **Thirdly**, the human body is a prosthesis which is controlled, impaired, replaced and manipulated in any way just like the body parts of a robot. In other words, the posthuman is an intelligent machine like a computer. There is left the least difference between cybernetic mechanism and biological organism and between robot teleology and human objectives. In this way the idea of posthuman seems to be a deconstruction of the liberal humanist notion of 'human' with his identity in the newer form- the cyber identity. *Icarus* in the novel represents at the same time, historical as well as technological extension of man to posthuman. The repairing issue of that and the ultimate working even in the better way than the *Terran* experts prove that human intellect and knowledge are different from bodily simulation of posthuman.

Literature Review
The issue of identity shift from human to posthuman in our ever-changing postmodern era is of great interest for scholars. How do persons, in this broken, multi-dimensional society, form their identities? This continues to flourish with its sociological and philosophical significance, as the features and factors about the construction of our identities have got diversified more dynamic and fluid in the era of postmodernism. So, identity in such a world is a fluid concept; a construct that is built as he moves along, according to his environment and his interests and interactions either physical or virtual. In a postmodern sense, the self is shifting, fluid, or as Berzonsky (2005) argues, identity is dynamic, multiplistic, relativistic, context-specific and fragmented. Further, Berzonsky (2005) states, ego identity may serve as a way in which an individual reaches out from a personal standpoint in this fractured and postmodern world.
So, the identity, according to Berzonsky (2005), has got fractured, scattered and reduced to pieces. From these pieces, we cannot find his true image as a human being. Any search for his true *self* seems to be a wild goose chase.

In the 20th century, Jean-Paul Sartre (1998) and Martin Heidegger (1962) observe dramatic change– a change which brought controversy, confusion and irreparable impact on human identity. Whatever the title given to this *"cultural revolution"*– a counter-culturalism, deconstructionism, contra modernism or postmodernism – they aim to retain the same "*core agenda, which is to 'liberate'* the man from the yokes of traditional foundations and the social fabrics which were secretly endorsed **upon him. But this liberty takes man to a limit where he loses his identity in philosophies of existentialism and absurdism.**
Scott Bukatman's (1993) gives the idea of *Terminal Identity* which indicates the annihilation of the conventional 'subject' and the rise of a new subjective world fabricated by the computer programming. He tries to appease down the persistent doubts of the significance of science fiction in contemporary cultural studies. Through his comprehensive knowledge, both of the history of

science fiction from its earliest days, and of cultural theory and philosophy, Bukatman tries to redefine the idea of human identity in the *Information Age*.

Referring contemporary theories of the postmodern Bukatman begins with the suggestion that Western culture is suffering a crisis brought on by advanced electronic technologies. He takes the reader on a journey to trace the postmodern subject from its current crisis, through its close contact with technology, and hence to new self-recognition. The new "virtual subject," as Bukatman claims, joins man and the technology as simultaneous, inter-reliant, and reciprocally defining. Baudrillard (2003) tries to protest against the loss of human identity in the cyber space by saying that electronic space is elusive, difficult to envisage and to grasp. Science fiction tries to redefine this intangible realm in terms of the known and the familiar. Our struggle should be to pay off for the loss of the human virtue in the maze of telematic culture by simply converting it into an arena which is to be in human control. Baudrillard has a fatalistic idea of the rise of the Virtual, as he replaces any existence of the 'Real' in return for an acceptance of a self-reflexive existence. This narrative can be traced throughout language, literature, art, music, politics – human identity as a whole. The lack of logo-centrism is a lack of any 'truth' to be searched and, according to Baudrillard, the very assumption upon which our existence as a species stands, *"Only something which has purpose comes to an end, since once that purpose is achieved, all that remains is for it to disappear. The human species has survived only because it has no final purpose. Those who have tried to give it one have generally sent it hurtling to its destruction"*. (Baudrillard, 2003:21).

Anyhow, Baudrillard tries to highlight the identity crisis in the posthuman era which is still continuous. The problem still remains to define posthuman identity and the super computer. Can we substitute human knowledge with some supersonic computer or machine? The issue needs to be discussed and resolved through proper theoretical framework, references and logics.

Hayles (1999) provides a comprehensive discussion on the issue of cybernetic identities and the complexities of being posthuman in his *How we became Posthuman*. She develops her theory of posthuman in three stages; the first is how information becomes an entity; transferable and downloadable as a BwO (Body without Organs) as called by Delueze and Guattari (1972). The second stage comes with the creation of cyborg/robots as a technological artifact and cultural icons particularly as described by Moravec (1988) and Foucault's (1977). The third stage implicates and embodies that whatever the progress technology and machine may make, they can't replace human intellect and consciousness.

Research Methodology & Theoretical Framework

The research has been conducted from the postmodern perspective. The analysis is done in the light of Hayles's idea of Posthuman. Hayles states that the posthuman is no doubt replaceable with intelligent apparatus with no essential differences between his corporal existence and computer imitation but his knowledge and consciousness can't be replaced by computers and machines. This feature has been highlighted in the novel through the major characters i.e. Thomas Cole, Reinhart and Dixon and through the bomb *Icarus*. The dialogues in the text uttered by these characters unpin the hidden layers of posthuman or cybernetic identity. The issue with the bomb *Icarus* also provides sufficient material to be exploited in order to show the man's bodily existence and his epistemological reasoning: a remarkable demarcation between from posthuman and man respectively

Data Analysis & Discussion

The Variable Man, Thomas Cole, was born in 1913, which is referred to as "the early part of the twentieth century." A time machine has transported Thomas into the year 2136.

The Variable Man explains how the years 1913 and 2136 differ historically. According to Hayles, 1913 was a highly typical year because it saw the emergence of the cyborg as a cultural image and technological artifact, especially in the years following World Wars I and II.

He was Earth's only hope—and its sure failure!" is equated with Hayles idea about posthuman which both '*evokes terror and excites pleasure*'. *Terror* in the sense that man is going to lose his liberal self, aesthetic pleasure, individual will and so on. In other words, he would lose his identity as a human being and would become a posthuman. *Pleasure* in the sense that man is going to gain the cybernetic identity as akin to computer and cyborg as Hans Moravec (1988) claims that posthuman, in the present moment appears to be a cultural sign for the global data. In this way it is a matter of pleasure that the whole body of data has been got collected in his mind which he can manipulate in any way. The people engaged with the Terran system; in the novel *The Variable Man* are busy in their working with corpora all the time. With the help of data, they can predict future even and can manipulate it. As a whole the journey from 1913 to 2136 can be seen in the form of the shift of Thomas Cole fro that pre-war age to the future years when the human intellect and consciousness, as his identity markers, are going to be measured in terms of data machines or corpora. The contrast/shift from human to posthuman may also be viewed through Plato's (428 B.C) character traits- [human] sophrosyne and [posthuman] hubris. [Human] Sophrosyne is a character trait marked by excellence and soundness of mind whereas[posthuman] hubris is an opposite and contrary concept about some character marked by the violation of norms and excess of pride in one's talents. In loose terms, it is some flaw or some lack(-ing) in a character that causes or may cause his downfall.

The researcher takes the liberty to make an analysis of Thomas Cole in contrast with the rest of the Terrans highlighting the concepts of sophrosyne and hubris. This analysis is to show the identity crisis of (post-)human as a whole in the cybernetic world. The following two extracts set the befitting dichotomy between human sophrosyne and Posthuman hubris as,

Reinhart and Dixon looked at each other. "This is bad," Reinhart said harshly. "He has some ability, some kind of mechanical ability. Genius, perhaps, to do a thing like this. Look at the period he came from, Dixon. The early part of the twentieth century. Before the wars began. That was a unique period. There was a certain vitality, a certain ability. It was a period of incredible growth and discovery. Edison. Pasteur. Burbank. The Wright brothers. Inventions and machines. People had an uncanny ability with machines. A kind of intuition about machines—which we don't have."

"I mean a person like this coming into our own time is bad in itself, war or no war. He's too different. He's oriented along different lines. He has abilities we lack. This fixing skill of his."

Here *Thomas Cole, the variable man,* is an epitome of human sophrosyne and *Reinhart and Dixon* Posthuman exhibit posthuman hubris. The attributes such as *Genius, unique period, a certain vitality, a certain ability, period of incredible growth and discovery, uncanny ability with machines, kind of intuition-* all construct the whole frame of reference of human sophrosyne. On the contrary the semantic repetition of the phrases *which we don't have*, and *we lack* set the vantage point of posthuman hubris; and that is his hubris i.e. his maniac inclination towards data and information, which causes his loss of identity. It has analogous relation with Oedipus myth who fell into the excessive pursuit of information about his father's murder; lost the balance between intuition and reason and hence collapsed.

The Icarus bomb

Icarus, the machine that travels faster than light and the machine that is the only hope of the survival of Terran System of human globe is to challenge the notorious and imperial designs of Proxima Centaurian planet but it gets some flaws. Its inventor has died and the men in Terran System and the robots try to repair it but all in vain. It needs some intuition which the posthumen and robots don't have. A human being namely Thomas Cole is transported from the annals of past

to the present in order to accomplish the task as he claims that he can fix anything ranging from Clocks to pots and pans. He can even manage the leakages in roof. *I can fix anything there is."* Icarus is the same case which he can repair easily with the help of his intuition. In this way posthuman suffers from identity crisis which had been the true asset of man in the past and is no more with the posthuman.

The myth of Daedalus and *Icarus* can demystify the idea of post-humanism. *Icarus* was warned by Daedalus neither to fly too close to the sun for that is to melt the wax, nor to fly too the feathers. Icarus could not follow the father's warning in his excitement and flew too close to the sun. The heat of the sun melted the wax on the wings letting the feathers get loose. A few minutes later, poor Icarus fell down into the sea and drowned. Henry Murray (1951 proposes the term Icarus complex. It is used for a maniac man who yearns for some extraordinary cognition. The posthuman is the one who has the fantastical craze for data and information hence crossing the limits of humanism like Icarus who violates the limits of warning and hence suffers. Posthuman suffers from identity crisis by losing his balance between rational and cognitive selves. He has submerged into the depths of data like *Icarus*, with the least hope of recovery. The whole race in the days of 2136 is drowned and lost in the depths of corpora, information and machines. Thomas Cole with his balance of intuition and cognition is the one who can still save them from eternal collapse. Dixon speaks about him as *"This man is different. He can fix anything, do anything. He doesn't work with knowledge, with science—the classified accumulation of facts. He knows nothing. It's not in his head, a form of learning. He works by intuition—his power is in his hands, not his head. Jack-of-all-trades. His hands! Like a painter, an artist. In his hands—and he cuts across our lives like a knife-blade."*

In this way *Icarus* theoretically deals with human (Thomas Cole with a balance between intuition and cognition) and posthuman (Dixon, Reinhart and others with their maniac expression of cognition).

Conclusion

In this way, the researcher unpins the factors through which an individual (de)forms his identity in a technology-ridden world as well as how the (de)formed identity takes him beyond the aesthetic and rational domains of being to a corpus or to be more accurate to a posthuman cyborg. In The Variable Man the writer Philip K. Dick sets a contrast (which is actually highlighted through shift) between the rational man in the 1913 (Thomas Cole, known as The Variable Man) and the cybernetic (post-)human in the 2136 (Security Commissioner Reinhart and Dixon). Icarus faces a fatal error and all robots and data handling experts fail but Tha variable Man who is beyond the reach of their data manages to repair Icarus and ensures their survival. The discussion proves how man is becoming just an instrument and object in the cybernetic world. He is getting more akin to a corpus than an aesthetic, intuitive and rational being.

I would like to refer Ihab Hassan (1977) in order to support my concluding remarks as, "We need first to understand that the human form-including human desire and all its external representations-may be changing radically, and thus must be re-visioned. We need to understand that five hundred years of humanism may be coming to an end as humanism transforms itself into something that we must helplessly call post-humanism". In other words, human identity has been reshaped into new dimensions during the years of history particularly after the Word War II and but his intuitive aspect can't be replaced by technological artifact. Human body may be a cyborg or prosthesis but his aesthetic, rational and intuitive sides of being are still beyond technological and discursive domains.

_____
Volume: 2, No: 2   October-December, 2024

1062

References

Baudrillard, Jean. (2003). *Passwords*. New York.

Berzonsky, M.D. (2005). *Ego identity: a personal standpoint in a postmodern world; Identity 5(2), pp.125-136*

Bukatman, Scott.(1993) T*erminal Identity: The Virtual Subject in Postmodern Science Fiction*. Durham: Duke UP.

Deleuze, Gilles and Félix Guattari. (1972). *Anti-Odepus*. Trans. Robert Hurley, Mark Seem and Helen R. Lane. London and New York: Continuum, 2004. Vol. 1 of *Capitalism and Schizophrenia*. 2 vols. 1972-1980. Trans. of *L'Anti-Oedipe*. Paris: Les Editions de Minuit. ISBN 0-8264-7695-3.

Derrida, Jacques. (1987). *Positions*. Trans. Alan Bass. London: Athlone,

Foucault, Micheal.(1977). *Discipline and punish: the birth of the prison*; New York : Pantheon Books

Hassan, Ihab. (1977). *Prometheus as Performer: Toward a Posthuman Culture?" Performance in Postmodern Culture. The Georgia Review*

Hayles, N.K. (1999*). How We Became Posthuman, Virtual Bodies in Cybernetics, Literature and Informatics,* The University of Chicago, USA

Hyland, D. A.(2008). *Plato and the Question of Beauty* (Bloomington & Indianapolis: Indiana University Press.

Heidegger, Martin. (1962). *Being and Time*. New York: Harper.

Laytord, Jean Fancois. (1979). *The Postmodern Condidition: A Report on Knowledge*, University of Minnisota Pres

Lyotard, Jean.(1979). *The Postmodern Condition: A Report on Knowledge,* Manchester University Press,UK

Moravec, Hans (1988), *Robot: Mere Machine to Transcendent Mind,* Oxford University Press USA

Plato. (1989). *The Symposium*, Greek text with trans. by Tom Griffith. Berkeley: University of California   Press.

Sartre, Jean-Paul. *Existentialism is Humanism.* (1998)*.* Shanghai: Shanghai Yiwen Publishing House,   1998