Future of Work and Dystopian Literature: Thoughts and Reflections

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Abstract

Frequently the world of innovation and discoveries give credit to eminent works of fiction for glancing into the future. Fiction writers are the unacknowledged legislators of the world, who reveal truth that reality obscures. Science related to the workplace has started *looking backward to move forward* and we have examples of ideas like servant leadership & organizational existentialism that emerged out of work of fiction. In light of the emerging discourses on the workplace and anticipated worldview of the post pandemic world, an uncertain future is looming over mankind with automation of workplace, artificial intelligence creating hybrid work structures with humans, involuntary surveillance of workers. Study has conducted a systematic literature review of seminal dystopian literature to draw key thoughts that are discussed for the future of the workplace. A thematic analysis has been conducted manually by researchers to extract key themes related to future of work in these novels. Study has also looked into the structures of the jobs discussed in seminal dystopian works on the basis of class conflicts or orchestrated designs due to subliminal thoughts of the society. Study has also archived various themes that literature reflected regarding future of work.

Keywords: Dystopia, Future of work, Existentialism, Organizational behavior, Job design

1. Introduction:

Earlier human beings considered time as a cyclical entity, as they were observing whether to measure the changes in time. It was assumed that reality is cyclical and a new year will come with return of summers or winters. However, with the invention of modern time measuring machines, human beings realized that time is linear. A new day drags the world into a new reality (Sloan, 2006). Thus now we are not trying to recreate the past rather we are building the future. Greek philosopher Heraclitus summed it well that "No man ever steps in same water twice" highlighting the constant flux, changes and dynamism of this universe (Vamvacas, 2009). Workplace is also changing considerably due to emerging technologies. Technology and Artificial Intelligence has brought a new dawn to the working environment. Morgan (2014) highlighted five major trends that are shaping the future of work i.e. new behaviors, technology, the millennial workforce, mobility and globalization. Morgan elaborated that a new work behavior is emerging due to internet and social media, this is further clubbed with big data and cloud computing. Further he also explained the change in attitude of millennials who are holding the offices and they are powered by mobility, in which you can work with flex hours. Lastly, globalization is diminishing boundaries that were existing between corporations, entities and people. Technology and artificial intelligence are referred as "new electricity" as new form of society, behavior of individuals and new work structures are taking shape. Different authors had been prophesizing about the future of work, Mernane and Levy (2012) discussed the old question that we will lose our jobs due to technology? They create a difference between routine and non-routine tasks, people with routine task should worry about finding their place in future workplace. Goldin & Katz (2020) considered education as the key, if our curriculums are updated then there will always be avenues where humans can find their unique competence. But there is always a dark side reflected of robotics, artificial intelligence or of digital technology. Such perceptions have not only been built by the electronic media and

Hollywood movies but critical thinkers are also skeptic about it. Alarming news emerge quite often now about absurd behavior of artificial intelligence. But on the other side we have been interacting with machines for quite a time now, cars, coffee machines, elevators, desktop computers had been replacing workers and bringing ease to our life. Mazis (2008) explored the same in beginning of 21st century, boundaries are diminishing between human, animal and machines. For Mazis, humans and animals are already co-existing, only machines have to make their place. From cochlear implants to digital assistants, various aspect of machines and artificial intelligence are already living with us.

There is a need to explore the downside/dark side of technology and digitization specifically at the workplace. Though technology and digitization is inevitable, these advances are increasing the level of monitoring (Holland, Cooper & Hecker, 2015), thus it seems that size of prison is increasing and tracking employees is getting easier. With increasing use of communication technologies, employees still perceive that trust deficit is increasing (Holland & Bardoel, 2016). Wheal (2022) highlighted the need of exploring the modern dynamics of work floor by quoting biologist E.O.Wilson "we have Paleolithic emotions, medieval institutions and god-like technology, but no one was offering advice on how to make sense of it all". Sudden and immediate presence of meta verse and other breakthrough technologies is giving no time to examine the impact all these technologies will make on human-self. Thus when we discuss the future of work, there is always a side demanding careful scrutiny of possibilities that can emerge for mankind. However, scope of current study is to archive various thoughts shared by fiction writers regarding future of work for mankind in their seminal works.

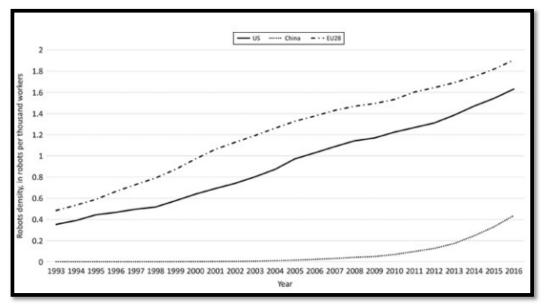
This study, firstly, explore seminal novels of dystopian literature with reference to future of work. Secondly, extract key themes related to future of workplace as predicted by dystopian authors. Study will see beyond the empirical data and will investigate the phenomenon through seminal works of fiction. Study will see beyond the iron curtain of technology which is reaping immediate fruits, yet a deeper inquiry will open up psychological or existential threats that are predicted in dystopian literature. Study will also leave some answers for co-existence for man and machine and will identify issues that can jeopardize the process of humanization of beings. Lastly, this will also support human resource managers and organizational behavior practitioners to design jobs that allow the human essence to transcend at the workplace.

2. Literature Review

Townsend (2017) shed light on areas like technology driven isolation, carbon foot prints required to keep the technology running and environmental concerns. Historically, Marx argued that whenever a new type of economy replaced the earlier one, the rearrangement favored the social class who would control the technology. Further Marx highlighted that this will cause alienation at the workplace, resultantly workers will be estranged from humanity (Healy, 2020). While technology was bringing productivity and efficiency at workplace, yet workplace was becoming stranger for humans, growth was only for matter and not the consciousness that was interacting. Similarly, current study aims to look into the future workplace, workplace decorated with Artificial intelligence, automation and other modern technologies and how various authors predict the downside of technological hype. As said by Warren Bennis "The Factory of the future will have only two employees, a man and a dog. The man will be there to feed the dog and the dog will be there to keep the man away from touching the machines" (Reese, 2018). Technology driven isolation is one side, other is excessive monitoring of employees (Hoffman et al., 2020), Smids et al. (2019) identified five major areas where automation and robotics at workplace will bring opportunities and negative consequences. Broader areas of meaningful work identified by researchers include pursuing a purpose, social relationships, exercising skills and self-development, self-esteem and recognition and autonomy. Along with benefits there are numerous caveats which researchers highlighted regarding the alienation of workers and existential crisis that can doom the humans at workplace.

But existence of technology and automation in workplace is already visible, if we look at the figure 1, a clear incline is visible in presence of industrial robots.

Figure 1. Robot Density in China, EU and US¹



Thus the dystopian image which was reflected by various writers and authors has started getting visible, robots are crawling into workplace, industries, and homes. Study by Acemoglu & Restrepo (2017) calculated the impact of robots on job market of US, decline in employment to population ratio was witnessed, similar effect was seen on wage rate. In few countries spillover effect balanced the impact of robots in industry/workplace (Dauth et al., 2017). This is just an early data of robots that are in preliminary stages of their evolution, however fourth industrial revolution or workplace of future will be totally different from the current world. Reese (2020) mentioned robots and AI as the fourth age for homo-sapiens, considering language and fire as the first age, agriculture as the second age and wheels as the third age of homo-sapiens. Though Reese also agree that automation and AI come as a threat for homo-sapiens, as all other earlier inventions were not evolving to be conscious or automated or had never developed a language. Thus greed for efficiency and effectivity, we might not lose the world of Keats and Milton.

3. Sample for Systematic Literature Review

Current study has conducted systematic literature review of seminal dystopian work to chalk out themes that are discussed by eminent authors regarding the future workplace. Out of numerous dystopian novels, following three novels have been shortlisted as frequently researchers had been using work of Huxley, Orwell & Zamyatin (Horan, 2007; Mahida, 2011;

¹¹ Source: Data from International Labor Organization (2017), IFR (2016).

Tuzzeo, 2008;). Congruent with the objective of current study, following seminal dystopian work of literature has been preferred for systemic literature review.

Table 1. Seminal dystopian work of literature

Title of work	Author	Language	Translation	Year of publication
We	Yevgeny Zamyatin	Russian	English	1924
Brave New World	Adlous Huxley	English	-	1932
1984	George Orwell	English	-	1949

Historically there are other dystopian literary novels also, however not considered for systematic literary review of current study because those novels don't offer an insight regarding future of workplace with reference to technology and surveillance which is one key objective of the study.

3.1 Rationale of Thematic Analysis

Themes have been extracted out of the novels manually by the researchers, keeping in view the objective of current study. Themes related to future, technology and digitization are extracted and how they impact the lives of workers. Word frequency technique is not used as in novels diversified words can be used to elaborate a single phenomenon. Moreover, novels use subliminal language to unearth the underlying critical themes of society. Thus, usual frequency tables may not be suitable technique for extracting insightful themes from work of fiction.

4. Analysis

The tables mentioned below summarize a brief summary of the protagonist, his industry of work, and job type:

Table 2. Profiles of Protagonist

Title of work	Job title	Other features of Job
1984	works in the Record	His major task is to redraw the truth by rewiring it in official documents due to the constant flux in the policies of the ruling regime/party.
Brave New World	Bernard Marx the protagonist of the fiction novel works as a sleep-learning specialist. He is deputed at the conditioning center	
We	D-503 the protagonist works as a spacecraft engineer and he is deputed at a project titled Integral	His major work is to make the launch of Integral successful in order to conquer the extraterrestrial world

Table 3. Future of working dystopian work titled We

Work	Theme	Coded for
	Emergence of Collectivism	Personal liberty of workers, individuals and office bearers is not important and it can be traded off with the collective well-being of the state (community, workplace)
We	Alienation	Workers and office bearers are found to be occupied with tasks for the greater good of the unknown state and that makes them alienated from themselves
	Technology as Control Tool	Individuals use technologies and other modern fiction tools, yet all that is used to control, monitor, and observe the lives of individuals. Even privacy is monitored.
	People's identity as numbers	Human beings' unique identity of names is replaced with numbers. The qualitative utility of names and meanings associated with them has been disassociated from human beings.
	Excessive Rationality	human beings. Ideas like mathematical bliss are encouraged for workers, cherishing uncertainty and aesthetical thoughts are prohibited

Table 4. Initial themes regarding the future of work in Brave New World

Work	Theme	Coded for
	Technology as Control Tool	Technology is used to pre-program the people so they can become marginally thinking and effective tool for the system of work. Technology designs and chooses the fate prior to their existence
Brave New World	Structured happiness	Happiness isn't any earned task rather it appears in the lives of workers through certain measures. However, this happiness lacks amusement that arrives due to surprises. It's learned happiness that came in the lives of workers and people due to the comfort of stability
	No unique identity	Each person is programmed to appear in the system as a worker, that is manufactured prior to their birth. Individuality doesn't exist rather beings exist who hardly think of themselves as a free thinker.
	Bodily humans	Workers are preprogrammed and are available to the system only as bodily humans, essence of human being is not available.

Table 5. Initial themes regarding future of work in 1984:

Work	Theme	Coded for
	Emergence of Collectivism	Individuality is eroded in cost of collective fascist thoughts, workers have no individual entity having freewill and choices and they happily embrace to the collective good of state
1984	Distorting Reality	Literature is changed every now and then to recreate history, workers' idea of reality is kept distorted.
	Technology as Control Tool	Even thinking freely is considered as a crime for workers and people, thought police keeps an eye on the free thinkers. Workers have to come in front of screens at their home after a regular interval to testify the fact that they are faithful to ruling entity
	Language to control thoughts	Ideas like double think and newspeak are used so people be the part of bandwagon and they may use language which suppresses their free thought
	People's identity as numbers	Apart from names, workers also have numbers as their call IDs. Freedom of protagonist starts the day he removes number from his name

Following initial themes are extracted from the text, the following table reflects the initial themes that have been shortlisted or dropped for focused thematic analysis.

Table 6. Initial Themes

Initial Themes	Selected Initial Themes	Focused Themes
Emergence of Collectivism	A	A. Quest for Individuality
Alienation	D	
Technology as Control Tool	C	
People's identity as numbers	В	
Excessive Rationality	Dropped	B. Numbers Representing Humans
Technology as Control Tool	C	
Structured happiness		
No unique identity	A	
Bodily humans	Dropped	C. Technology as Control Tool
Emergence of Collectivism	A	
Distorting Reality	Dropped	
Technology as Control Tool	C	D. Alienation
Language to control thoughts	Dropped	
People's identity as numbers	В	

4.2 Focused Themes for Analysis

Themes emerging with frequency in all the dystopian works are further shortlisted for analysis of future of work as theorized and thought by dystopian writers.

A. Quest for individuality:

Individuality of human beings at the modern workplace is thought to be compromised. In WE, workers are considered to be cogs in a giant machine and their individual aspirations, goals, and passions of life have no place, they have traded that for collective benefit. Title of the work WE highlight that here is no space for I, there is no space for individual dreams and aspirations. Arts is considered to be a special type of epilepsy that provide leisure to mankind and they lose their attention from mathematically scheduled life, hence it is not allowed in that society and if such passion appears in human being then they are properly treated. Even music is composed on logic, and rationality and not to give any uncertain thoughts to listeners which might provoke a question for knowing himself/herself.

Another work that was used for current study also reflected that individuality of the modern worker will be conquered. In the work 1984, a person having *ownlife* (word from the Newspeak, language that was arranged to control human behaviors) was considered to be abnormal and might be considered as a threat to the society. Even for leisure people gather in community centers and in hours of solitude after regular break their loyalty with the system (workplace) was checked. They had to stand in front of a telescreen and pledge the loyalty to the system (workplace).

Brave new world sheds light on this phenomenon from another angle, advancement of genetic science was used to control this deviating behavior before time, prior to birth gene engineers will choose the place of the human being in the society. People are divided into classes so they can grow up and fit into the system.

B. Numbers representing humans:

Numbers have an outstanding utility since the time of Pythagoras, our modern computer system has been on phenomenal rise due to the use of binary digit. However, they also have limitation, they eliminate the qualitative individual capacities from any phenomenon. Words, names and nouns are one of important invention of human beings through which we express our inner beings, our beings are authenticated by expression of language. Protagonist of WE and 1984 had a number as their name. That again crushes the unique individuality which is associated with historical names. 1984 had a language called as newspeak that eliminated words that might spread individuality, hope, creativity and free thinking in human beings. In the work WE, protagonist has a name D-503, which sufficiently takes away all the qualitative attributes of an individual. In 1984, the protagonist has a name 6079 Smith W, again number has been forcefully added in the entity of human beings. In Brave New World, humans are divided into various classes, again having symbolic sign names of their general category. Society is classified into alpha, alpha minus, beta etc., hence roles of human beings in larger machinery of the society are pre-destined and any qualitative attribute that may allow them individuality is eliminated even before the birth.

C. Technology as a control tool:

Technology has been shaped to be used as a control tool, more specifically technology has been used effectively to perform surveillance of the individuals in the society. In Orwell's 1984, technology is used to regulate fear, create discipline and to engrave on the minds of the people that they are always under observation, thus the statement "Big Brother is Watching You"

became a famous tag line of surveillance culture. People in 1984 have to give their allegiance to the ruling class via technological tool (telescreens) that they are present and fully obedient to the ideology of the ruling class. Technology is used to structure the society, induce fear, forced obedience and a fake sense of freedom and utility. Similar case is observed in brave new world, where bio-technology is used to design and cluster the human beings so no extra force is required later to monitor them. Thus bio-technology is used to design human beings and to classify their roles in the society and how they can perform the services for ruling elite. A soulless conformity is designed via technology in brave new world. Lastly, in the work WE, the overall design of society is of a great machine and technological advancement is used to repress the identity and freedom of human beings. Even happiness is defined in mathematical language, data science is used to assign people with numbers, routinize each activity and even to assign them friends and lovers. Thus technology has been used to bring people to excessive routinized and rationalized society, resulting them to be bodily humans only.

D. Alienation:

The population of these three dystopian novels is alienated from themselves. Partial awareness is found in the protagonist of the study. The rest of the population has no personal meaning in their life. People take pride in collectivism or abiding by any ruler with whom they didn't interact directly. Historically social alienation is considered jeopardy for human beings. However, the authors discussed that in the case of modernity, a case opposite to social alienation is encountering human beings that is a lose a greater meaning in their personal lives. Thus people are estranged from the machine of the society and they have lost any higher meaning, goal, art or literature that can provide the meaning. In all these works, the protagonist struggled to find books of independent thinkers, equipment to write stuff, etc.

5. Discussion

Individuals at the workplace are banded together and have been merged into a larger whole, Sion (2014) elaborated that individual has to compromise their greater good for the collective good of the whole. Thus resulting in a lost individuality for the collective good. Just with the presence of machines in the workplace. Kanungo (1982) discussed how repetitive tasks cause alienation and dehumanize the intrinsic needs of human beings. Kanungo further cited the work of Blauner (1964) who observed that industries having less freedom due to machines at the workplace suffer more from alienation. As we step into the workplace where we co-exist with machines, further two forms of alienation are looming over human beings; acting like a machine and knowing that you cannot act better than a machine. Earlier alienation was the absence of greater meaning while working in a machine-like system, however now the challenge has doubled when you actually try to be like a machine and lose your spirit (Berlet, 2006). Other scholars believe that due to digital machines (artificial intelligence) five major categories of alienation is taking over human beings at the workplace i.e. powerlessness, meaninglessness, normlessness, isolation and self-estrangement (Healy, 2020).

Moreover, human beings working or living in social settings are becoming a bulk of numbers that are associated to them at various levels. Thus, human beings are not understood as qualitative beings having goals and dreams, rather myriad of numbers represent human beings at office, bank and other places. Technology is isolating the essence of entities in the society. Even at workplace numerous numbers replace the qualitative essence of human being and are creating an isolation of real self from the self that is accepted and registered at the workplace.

Surveillance capitalism is a new term that is creating ripples in the world of research, where people's information is the resource, which they share subliminally on social media platforms. Thus making it easier and effective to monitor them and in much clandestine manner.

Surveillance capitalism not only refer to easy monitoring but how same information is used to control the behavior of people at social media (Zuboff, 2019). This might be relevant for social media but dynamics at workplace are similar. People are followed, traced and getting amn escape from work is getting difficult. With digital technologies, employees are engaged in official tasks all the time and shunning the work after office hours is getting impossible. Discourses of organizational well being have started including terms like Zoom fatigue to reflect how employees are continuously available for official tasks and liberty of free hours and leisure are getting compromised (Wall, Cooper & Brough, 2021). Thus, technology is making possible "work from anywhere" but it is also increasing the case "work always and anytime" (Hill & Hill, 2021). Technologies are introduced to enhance efficiency and effectiveness but they become a modern shackle for the workers. While they generate data for the Artificial intelligence, they are also easily tracked to the minute level (Harmon, 2017).

5.1 Implications

Study has implications for organizational behavior practitioners and human resource managers for designing the job which vanguards the essence of human kind. Job design may allow mindfulness and provides right fit of technology and nature. Importantly, managers and leaders at workplace may call employees with their names and add qualitative value to their existence. Employees' presentation to be preserved with their names and nouns. Detox hours or tech-less hours implemented so humans can interact in a noble-savage environment. As Covid pandemic is getting over, techniques to normalize physical interaction to be implemented at workplace. More authentic and organic interactions to be encouraged to detox the excessive use of technology. Lastly, human resource department in modern times may preserve the individual identity of workers in the collective existence of the organization.

5.2 Caveat for future workplace:

Man is the measure of all things, after Darwin's inclusion in social theory, most of the works of quantum physics are making space in social theory and observer's effect is reminding the words of Protagoras that man is still the measure of all things. While chasing efficiency, productivity and effectivity we may not surrender the prime being of this universe. Thus, demanding for an urgent balance, limiting the use of technology, robotics and artificial intelligence. The global crisis of depression as reported by the Economist in 2015 already rang the bells that human beings as a collective species are decaying with the catalyst of technology. Qualitative essence of human beings at workplace to be preserved rather than assigning numbers and quantifying the values of human beings.

5.3 Limitations & Future Research Direction:

Study has been conducted on secondary text, out of which one of the text (We) used in the study was translated from Russian language, hence *lost in translation* for one particular text is the major limitation of this study. Moreover, other dystopian texts have been written in similar genre, still current study was limited to three seminal (We, Brave new world, 1984) novels. In future, researchers can club up other dystopian text in this sample size for study. Future researchers can also conduct a study by doing qualitative interviews to observe the perception of human resource managers and workers regarding the results of this study.

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