

Dystopic Side of Science and Technology in Crichton's *State of Fear*

This research is a study into Michael Crichton's novel *State of Fear* from the perspective of utopian and dystopian notions and the impacts of science and technology to the living condition of mankind. Basically this novel is regarded as a techno-thriller or a science fiction. It draws heavily on scientific data regarding global warming and environmental issues and points to the dark side of the science that it can be abused to serve the interest of a small bunch of scientists for their personal or group benefits. In the novel, there are all the things necessary; villains, heroes and an evil plot to be foiled. Major villain is Nicholas Drake, director of an environmental group called the National Environmental Resource Fund (NERF), who has abused the donation given to his organization by his main donor Morton for the environmental causes helping a group of eco-terrorists.

The radical eco-terrorists group ELF is wreaking havoc causing a series of climate-related catastrophes. More the catastrophes are created, there would be more fear and alarm for global warming and other environmental issues, thereby they could gain more and more donations. It is a vicious cycle of charity business that gives rise to a dystopian society. Drake believes the disasters will convince the public that global warming is grave concern that can be foiled only by giving huge sum of donation to NERF. Drake himself believes that global warming is not so grave problem but he has to show it as the major problem that is putting whole of the humanity into peril. He makes his intention clear:

You can't raise a dime with it, especially in winter. Every time it snows people forget all about global warming. Or else they decide some warming might be a good thing after all. They're trudging through the snow, *hoping* for a little

global warming. It's not like pollution, John. Pollution *worked*. It still works. Pollution scares the shit out of people. You tell'em they'll get cancer, and the money rolls in. But nobody is scared of a little warming. Especially if it won't happen for a hundred years. (295)

Drake is an activist working against the environmental problems and making human life safe and easier. When we look at his motive from surface, it is apparently utopian motive with good cause, a motive to make the world and society free of environmental problems and the life of the people go smoothly on the earth. But his inner motive is ominous; he is working not for the environmental or humanitarian causes but for the interest of a group or personal gain. This character with dual nature is responsible for the depiction of horrific living condition and threat of global warming as alarming. He is funding for the eco-terrorist group like ELF who blast explosives underwater, generate false storms and raise sea levels and perform many of the terrifying activities in environment so that the environmental crises are seen at their worst condition possible.

John Kenner, former M.I.T. professor working for the National Security Intelligence Agency keeps an eye to Drake. He doubts issues related to global warming and some irregularities going under the promotion of this issue as the major environmental threat that provokes the fear of peril in the human society. Global warming, he says, was "a setup from the beginning" (245); it is just a theory promoted by scientists and fear-mongering environmental leaders for their gain. Finally, Morton allies with Kenner and they unmask the abusers of Morton's fund donated to NERF for the humanitarian cause. They track the ELF eco-terrorists and foil their plan to cause a storm blasting explosives under the sea.

The major problem this research focuses is the abuse of science and technology by a group of people to rule over the mind of ignorant public. The motive behind science and technology is utopian and general public believes that it is being used to create the better world for mankind but at the same time, playing upon the ignorance and trust of the ordinary people upon the scientific world, they may be making the world worse with its abuse. The condition thus generated will be dystopic and the mankind would have nothing to do but pay the price upon their flawless trust upon science and technology at such condition.

The abuse of science and its construction of dystopic condition is evident as Drake, the major environmental activist and the director of reputed organization working for environmental cause, NERF, himself finances the money to foster eco-terrorists so that the problem of global warming would appear alarming and he could gain more and more donation to fight against the global problem. The pious utopian purpose of science and technology can create dystopic condition in the world and wreak havoc upon the people's life if personal interests become more important than the interest of the mankind in general.

State of Fear is discussed from various perspectives since its publication. Many of the critics have criticized him for his depiction of science in negative lights and he is treating too familiar themes without artistic elegance in his novels. Yet, many of the critics hail his writing techniques and the cautionary role played by his novels regarding the science and technology, for both the ordinary readers as well as scientists. Kareen Weekes is disappointed with the lack of sophistication and depth in the novel:

Unfortunately, these sorts of political exigencies seem awfully familiar, especially when used in the service of well-worn themes. And Crichton's

narrative style is not much of a help. As plain and stiffly serviceable as a Mao uniform, it lacks expressive elegance and leaves the reader wishing for greater psychological richness for colors other than red. (14)

Weekes criticizes Crichton's novel for his treatment of overused themes. Crichton has used the politicization of the familiar issues and in turn, it comes to serve the worn out themes. His narrative style does not help this lack of expressive elegance at all. The novel is impoverished in various psychological aspects other than the sinister look into science and technology.

In contrast to Weekes' perspective, Matthew Parker focuses on richness of plain style giving importance to the traditional cultural society as he argues, "While narrative style appears 'plain and unassuming, his work is always captivating and rewarding.' Working in the tradition of classic story . . . He strongly prefers a well-spun yarn to elaborate stylistic experimentation" (23). Parker hails the elaborate experimentation in style in Crichton's novel. He sees richness in his plain style while Weekes sees lack of elegance in his expression. Crichton is certainly innovative. Despite his innovative hallmark, he is content to work in forms and genres that are long established. It presents the stories of characters that face life in a post-modern, post-industrial, television culture. In the introduction to *State of Fear* on official website of Flannery O'Connor Award, it says, "Crichton, who was raised in China and emigrated to United States after the Tiananmen Square massacre in 1989, writes about loss and moral deterioration with keen sense of survivor."

Kevin R. Grazier has edited a volume of review collection of Crichton's works, *The Science of Michael Crichton*. Numbers of writers have discussed Crichton's works from various angles in their essays, most of them celebrating the theme he handles in his novels. In introductory part of the volume, Grazier writes:

In recent books like *State of Fear* and *Next*, his online essays, and his speeches, Michael Crichton does an excellent job of pointing out where science today can be far more . . . scientific. As much as I dislike the trendy saying, Crichton is all about “keeping science real.” Some scientists appreciate it, some even pay attention, and again I find his writings speak to me in pertinent and timely ways. (ix-x)

Grazier celebrates Crichton’s works for pointing out the aspects where science should improve. He does not like fashionable statements like Crichton is all about “keeping science real.” He is doing excellent job to inform the scientists about the possible hazards the science can bring. Many of the scientists are benefitted through his works.

David M. Lawrence also voices similar concerns. He points out to the possibility that science can go wrong. He draws on the history of science fiction and points out that most of the genre contains scientist-villains working alone or in small group going beyond the general goal of mainstream science. Lawrence further celebrates the novel, *State of Fear*, as a landmark novel taking the genre of science fiction to another level:

That science can go wrong is no secret. The theme has been a staple of science fiction since the birth of the genre in the nineteenth century. The classic scientist-villain in these stories is usually evil, demented, or brilliant yet clueless, working alone or within a small organization, and almost always working beyond the fringes of the mainstream science of the time. In *State of Fear*, Crichton takes this paranoia of science to new levels. (132)

According to Lawrence, the paranoia of abuse of science and technology enters new level with Crichton’s novel *State of Fear*. It is one of the valuable contributions to the genre of science fiction. Keeping all these criticisms in mind, this research studies the

dystopian space the science and technology creating in the world affecting the condition of human life adversely. It is because of the evils of science and technology; people are compelled to live a fearful life. This fear is chiefly because ordinary people do not understand what is going on in the scientific world, how science is being used and they need to leave their existence to the trust of few scientists with the belief that they will keep the mankind secure.

Utopia and dystopia are two terms that present the possibility of the world as the best and worst spaces for human life and are formed on the basis of certain ideologies. Both of the terms are used to show the present day problems and how the world can be developed into the ordered and best possible space or goes to become the worst possible space full of disorder and chaos from the present day condition. Michael D. Gordin, Helen Tilley and Gyan Prakash have clarified those notions in easy terms:

Projecting a better world into the future renders present- day problems more clearly. Because utopias tend to be the products of scholars and bookworms, it is not surprising that from the time of the concept's (or at least the term's) formal birth in the Renaissance, it has attracted quite a bit of academic attention. (1)

Promoting utopia or utopian ideology is basically grounded on present day condition. The belief of utopia and dystopia always capitulate on the present and problematic condition of the world.

The term utopia has its root Renaissance period because it generally tends to be the product of scholars' or thinkers' mind. This term had great academic attention since the term was first coined. Utopias or utopian thoughts range from the Plato's Ideal State to the world projected by science fictions:

Much of this history is easily accessible, even second nature, to intellectual historians, and it traces the genealogy of ideal, planned societies as envisaged from Plato to science fiction. The appeal and the resonances are obvious and rather powerful: religious roots in paradise, political roots in socialism, economic roots in communes, and so on. (1)

Utopia has its religious roots in paradise, political roots in socialism, and economic roots in communes and so on according to Gordin, Tilley and Prakash. They also shed lights on the origin and development of the term dystopia:

Much like utopia, dystopia has found fruitful ground to blossom in the copious expanses of science fiction, but it has also flourished in political fiction (and especially in anti- Soviet fiction), as demonstrated by the ease with which the term is applied to George Orwell's *1984*, Evgenii Zamiatin's *We*, and Aldous Huxley's *Brave New World*. Despite the name, dystopia is not simply the opposite of utopia. A true opposite of utopia would be a society that is either completely unplanned or is planned to be deliberately terrifying and awful. (1)

Dystopia spreads over a large mass of science fictions. But according to Gordin, Tilley and Prakash, it has also flourished in political fiction, especially anti-Soviet fiction. This condition, suggested by the term dystopia can be easily mapped with the conditions depicted in George Orwell's *1984*, Evgenii Zamiatin's *We*, and Aldous Huxley's *Brave New World* and these works of arts are generally taken as dystopian fiction depicting dystopic world. Dystopia actually cannot simply be regarded as opposite of utopia. The true opposite of utopia would be completely unplanned society or a planned society deliberately to make it terrifying and awful. "Dystopia, typically invoked, is neither of these things; rather, it is a utopia that has gone wrong or a utopia that functions only for a particular segment of society" (1). Actually,

dystopia is the condition utopia gone wrong. Helga Nowotny writes, “The dystopian social order split irreversibly into those who controlled and those who were controlled. In *1984*, the laws of nature would be suspended and put under the control of The Party” (10). Presenting the example of Orwell’s novel *1984*, Nowotny points out that dystopian social order is the order of society that is split between the controller and controlled. The law of nature is broken down and the society is put under the control of the party.

Michael Crichton’s novel *State of Fear* can also be examined from the perspective of dystopia. The science that is represented in his novel is technically a kind of management of people’s belief and preparing for some unprecedented consequences of global warming. The terrible thing is that the very science is abused in the hand of eco-terrorist further breaking the chaos in the world. The plot and actions move ahead revolving around the issues like Global Warming, science lectures, introduction of the villain group of eco-terrorists, and their possible relation to George Morton's NERF organization. John Kenner, the hero of the novel, the professor of Geo-environmental Engineering at MIT, and a secret agent for an unnamed national security organization, is involved in the action later. Kenner relentlessly pursues the villainous terrorist group to Antarctica, Arizona, and a remote Pacific island infested with cannibals. Kenner is also a brilliant and well-informed critic of Global Warming, and proceeds to inform about the truth and politics behind Global Warming discourse through a series of conversations throughout. The conversations, graphs, charts and footnotes are used to show the reality and doubts behind global warming theory. In the novel, Crichton gives a message that a new politico-legal-media complex has taken over control from the military industrial

complex, and is dedicated to controlling the population by promoting a state of fear about false environmental scares like catastrophic Global Warming.

Generally termed as a techno-thriller, this novel begins with series of murders. At the very beginning of the novel, there is a mysterious murder of a physics student in Paris. An exotic sounding beautiful girl named Marisa seduces twenty-four years old Jonathan Marshall, a graduate student in physics from London. In the summer, he is working for the “ultramodern” wave mechanics laboratory of the French Marine Institute in Vissy, “just north of Paris” (5-6). He is experimenting on “a large open tank, perhaps fifty meters long and twenty meters wide” (3). It is Sunday; most of the people have gone to church and they are spending their time together peacefully. The girl has got another lover and Marshall knows it but she is too tempting and beautiful for him. It was a lonely summer for him and so “Which was why he could not believe his good fortune at meeting this girl. This extraordinarily beautiful and sexy girl” (6). She asks him innocently about the tank and machines he is experimenting. He gives her the information about them. Soon, he is murdered by unknown bunch of people and the girl proves to be a fake girlfriend working for a criminal group. The opening with murder and suspense makes the novel a thriller from the very outset and evokes certain fear regarding those ominous signs.

In the novel, George Morton is an American philanthropist. He has got his attorney named Peter Evans. Morton is a millionaire and Evans works for him to help him manage the legal affairs in any of the charity acts of Morton. Morton is supporting an environmentalist organization the National Environmental Resource Fund (NERF) and Evans has the duty to carry on the legal proceedings of Morton to the organization.

One of the major donors of NERF, Morton, experiences unease and some suspicion to Nicholas Drake, the Head of National Environmental Resource Fund (NERF) as they see each other in Stangfedlis, Iceland for the first time for the environmentalist project related deals. The reason behind his uneasiness is that he does not include the main donor, Morton, in conversation as he privately talks to a new man, Per Einarsson, in project related matters.

“I’ll just point out the stakes,” Drake said. “Help him to see the big picture.”

“Frankly, I was looking forward to hearing this discussion,” Morton said.

“I know,” Drake said. “But it’s delicate.”

As they came closer to the glacier, Morton felt a distinct chill in the wind. The temperature dropped several degrees. (41)

The distinct chill experienced by Morton as he is not allowed to listen to the conversation between Drake and Per is metaphorical. The chill of weather refers to the psychological chill Morton experiences as he is kept out of so-called delicate matter they were discussing. Whatever is their mission or the secret tryst, Morton is the main donor for their project and so, he has to donate a fund for it. A donor is excluded from the discussion is bound to fall into suspicion.

Before this, the novelist sets the horrific tone of the world around. Various strange activities are going on in various major cities of the world. A group is hiring submarines, another group in another region is buying explosives and mysterious and clueless murders and bloodsheds are going around. During the meeting too, Morton’s attention is diverted to some beautiful girls that might be arranged for the purpose of diverting him as he liked beautiful women. The legal representative of Drake’s organization, Peter Evans, was always with Morton during the secret conversation and wary that Drake may mislead NERF. His law firm represented NERF, so he needed to

be careful: And more important, Evans's firm also represented Nicholas Drake, and Evans had a nagging concern about what Drake was up to. Not that it was illegal or unethical, exactly. But Drake could be imperious, and what he was going to do might cause embarrassment later on. (42)

Soon after this, the director of NERF, Drake, comes into the suspicion of the organization's main donor, Morton, as Drake has misused some of the funds Morton had donated to the group. Drake's misuse of the fund is shown apparently accidental but it can be intentional too.

Science is under continuous doubt in the novel. Though Evans believes the general theory that global warming is result of greenhouse gases trapping the heat of sun in the atmosphere, there are number of interpretation of the phenomenon among the various cults of scientists. They all try to gain from their assumptions about the phenomenon and act differently. As Drake sends Evans to Balder's lab for some legal business-related matters, the conversation between Evans and Balder shows big gap even when both are learnt men:

Evans said. "My statement — that's what global warming is."

"In fact, it is not." Balder's tone was crisp, authoritative. "Global warming is the *theory* —"

"— hardly a theory, anymore —"

"No, it is a *theory*," Balder said. "Believe me, I wish it were otherwise.

But in fact, global warming is the *theory* that increased levels of carbon dioxide and certain other gases *are causing* an increase in the *average temperature* of the earth's *atmosphere* because of the so-called 'greenhouse effect.'" (81)

Balder dismisses Evan's conventional belief that "Global warming is, uh, the heating up of the surface of the earth from the excess of carbon dioxide in the atmosphere that is produced by burning fossil fuels" (80). He just calls his belief as a theory and the phenomenon of greenhouse effect as a so-called phenomenon. A lot of questions related to global warming are raised before Evans as Balder suggests him to give an interview to his secretary Jennifer so that the lawsuit that proves there is an alarming level of global warming could be benefitted:

"All right. Now you mentioned the temperature started to rise from 1890, up to about 1940. And we see here that it did. What caused that rise? Carbon dioxide?"

"Um . . . I'm not sure."

"Because there was much less industrialization back in 1890, and yet look how temperatures go up. Was carbon dioxide rising in 1890?"

"I'm not sure." (85)

This interview shows there are large numbers of questions related to global warming that go unanswered. Before industrialization, the level of greenhouse gases was very low. The question is how global warming was on rise at that phase. Is there not a politics for the large industry of donation depicting global warming as a humanitarian issue?

Later, as Evans meets Kenner, an international law enforcement agent who is working under the disguise of a researcher, the fear that the very theory of global warming is being abused by an eco-terrorist group called ELF and in the name of mankind and environment, they are terrorizing the world:

Kenner nodded. "Have you heard of the Environmental Liberation Front? ELF?"

“No,” Evans said, shaking his head.

“Not me,” Sarah said.

“It’s an underground extremist group. Supposedly made up of ex-Greenpeace and Earth First! types who thought those organizations had gone soft. ELF engages in violence on behalf of environmental causes. They’ve burned hotels in Colorado, houses on Long Island, spiked trees in Michigan, torched cars in California.” (181)

The disorder brought to the society and unrest that is being inflicted with terrorist activities with the abuse of science is evident. Though science is utopian in its primary motive that it wants to make the world and human life easier to live, it can create dystopia for the money and power monger scientific groups is evident.

ELF is one among such groups; it engages in violence on behalf of environmental causes so that they can gain more from the donations with the promotion of false proofs that humanity is really in crisis. They promote fear factor to the society. They have burned hotels, houses, spiked trees, torch cars and thus putting the human life into unease. The motive behind the planning of unrest society by ELF is unjust and the very motive is responsible to promote adverse human condition in the world. As Gordin, Tilley and Prakash explore into the notion of dystopia:

In a sense, despite their relatively recent literary and cinematic invention, dystopias resemble the actual societies historians encounter in their research: planned, but not planned all that well or justly. One need not be a cynic to believe that something in the notion of dystopia would be attractive and useful for historians of all stripes. Every utopia always comes with its implied dystopia—whether the dystopia of the status quo, which the utopia is

engineered to address, or a dystopia found in the way this specific utopia corrupts itself in practice. (1)

It is clear that dystopias are planned societies but they are ill-planned or unjustly planned ones. Every utopia or the planning for the better living condition for mankind but at the same time it deteriorates the condition of society if the planning goes wrong. Every utopia contains the seeds of dystopia in it. Utopia may be corrupted in the practice and turn to a dystopia at the same time. They clarify further:

In a universe subjected to increasing entropy, one finds that there are many more ways for planning to go wrong than to go right, more ways to generate dystopia than utopia. And, crucially, dystopia—precisely because it is so much more common—bears the aspect of lived *experience*. People perceive their environments as dystopic, and alas they do so with depressing frequency.

Whereas utopia takes us into a future and serves to indict the present, dystopia places us directly in a dark and depressing reality, conjuring up a terrifying future if we do not recognize and treat its symptoms in the here and now. (1-2)

It is clear that there are more areas that can go wrong than right in any of the well planned utopian notions. There are more ways for dystopia than utopia in practice. The problem is that even the natural environment is dystopic for the people frequently as people tend to feel unease with little bit of heat, rain or cold. Dystopia is the assumption of worst future of mankind in contrast to the present condition putting our dystopic experiences into the extreme.

The director of NERF, Drake, is not content in the novel about the current climate change. He expects extreme expression of global warming but the temperature is only rising by a degree in a century. Since it is not bringing the calamities and disasters as he anticipates, he is not happy:

Perhaps Drake was more explicit in private — everyone was — and obviously he felt under pressure to raise money. But the frustration he expressed was perfectly understandable. From the beginning, the movement had to fight apathy in the broader society. Human beings didn't think in the long term. They didn't see the slow degradation of the environment. It had always been an uphill battle to rouse the public to do what was really in its own best interest. (297)

Drake is in pressure to raise money at any cost. He is frustrated because there is no catastrophe created by climate change and the boarder society reports him nothing unusual is going on. So, he is very frustrated. He wants full scale catastrophe caused by global warming so that more fund would be donated to his organization to fight against the environmental crisis. This is the reason he makes up his mind to finance for the eco-terrorist group ELF that plans artificial catastrophes. The evil planning for the personal benefits leads the mankind to the dystopic condition.

Two men, John Kenner and Sanjong Thapa, visit Morton and involve in some confidential talks. They appear to be the researchers at MIT but actually they are international law enforcement agents. They are following the clue of an eco terrorist group called Environmental Liberation Front (ELF). ELF is trying to wreak havoc creating artificial natural disasters and persuade the people about the consequences of global warming. The natural disasters created by involvement of people in nature from outside abusing scientific technology makes the world a dystopic one as it is already a dystopic and horrible by the unprecedented climate change. A connection between NERF, its director Drake and the actions of ELF is suspected because the terrorist activities of ELF to publicize the global warming and NERF-sponsored climate conference that emphasizes the catastrophe of global warming go side by side.

Kenner has suspicion over the discourse of global warming itself. According to him, it is well planned and promoted belief. As he tries to convince Evans, he tests the way the discourse was made prominent environmental problem from the very beginning:

Kenner shrugged. "Environmental concerns don't come to the public's attention by accident, you know."

"What do you mean?"

"Well, take your favorite fear, global warming. The arrival of global warming was announced dramatically by a prominent climatologist, James Hansen, in 1988. He gave testimony before a joint House and Senate committee headed by Senator Wirth of Colorado. Hearings were scheduled for June, so Hansen could deliver his testimony during a blistering heat wave. It was a setup from the beginning." (245)

Kenner traces the point of human history from which the discourse of global warming made known to mankind. The people do not understand or experience the minor changes in atmosphere by itself. The issue is brought deliberately to public attention by American climatologist James Hansen in 1988. He gave the testimony of global warming before a joint House and Senate committee headed by Senator Wirth. The hearing was scheduled in June, the time of the year where people were experiencing very hot weather. There are a lot of doubts if the discourse of global warming was not planned and it was real. Kenner suggests that there is large mass of upper-class people that thrives on promoting the fear factor to the society and making the mind of ordinary public unsettled. The present existence is meddled selling the fear of dystopic future. Only the science that is controlled by upper-class people and power

elites can do it. If the promotion of fear fails and they cannot thrive as expected it can be abused so that a dystopic condition can be created.

Drake is frustrated due to similar conclusion and he is desperate that he is unable to make money from global warming issues. People do not believe on the unnecessary exaggeration of the problem as they do not experience any serious changes in environment. He exaggerates the problem showing the impacts of global warming in various aspects of environment but people do not heed to the exaggerated warnings:

Species extinction from global warming — nobody gives a shit. They've heard that most of the species that will become extinct are insects. You can't raise money on insect extinctions, John. Exotic diseases from global warming — nobody cares. Hasn't happened. We ran that huge campaign last year connecting global warming to the Ebola and Hanta viruses. Nobody went for it. Sea-level rise from global warming—we all know where that'll end up.

(296)

Drake has tried all the propaganda on global warming but he failed time and again to invoke real panic on the people. He circulates the story of species extinction but nobody is serious. He claims that global warming is bringing forth exotic diseases but nobody cares. He failed to make people believe that Ebola and Hanta virus were result of global warming but nobody listens. People do even not believe the sea-level rise due to global warming and the propaganda is not working for his cause. He is not making money out of it; nobody is donating for the environmental cause. In this frustration, he abuses science to his purpose; to terrorize people creating the artificial storms and natural disaster. He has no option left other than to finance for eco-

terrorist activities of ELF so that he could gain from global warming. This is the planning of dystopia with the abuse of science and technology.

The terrorists involved with eco-terrorist group do not care how many people are killed during their terrorist activities. They artificially cause the natural disasters and kill the people cruelly if they come between their plans. They kill the people in mysterious way so that nobody would be able to see the deaths as murder. They use the venom of rare Australian blue-ringed octopus that paralyzes the people. They also use lightening attractors that kills people by electrocution during electrical storms. Kenner and Thapa, the agents of international law enforcement, suspect Drake that he may be involved with the eco-terrorist group ELF so that he could amass more donations for the NERF's environmental concern in the name of global warming.

ELF has become one of the major security threats to the world and the way they work is not easy to tackle with. They are using advanced technology and communication channels that could not easily be detected:

If ELF was once a loose association of amateurs, it was no longer. Now it was a highly organized network — one that employed so many channels of communication among its members (e-mail, cell phones, radio, text messaging) that the network as a whole eluded detection. The governments of the world had long worried about how to deal with such networks, and the “netwars” that would result from trying to fight them. (255)

ELF was regarded as a loose association of amateurs at the beginning and it was not taken as serious security threat at the beginning. But it is grown up and has become a serious security threat now. The terrorists are using advanced science to spread panic through terrorist activities to fulfill their interest is evident. They are organized and using the communication channels that elude the monitoring of the governments and

they have become the headache for the governments. Trying to fight them would result in netwars, the war between government network and the illegal, terrorist networks taking the world to a dystopic condition. Terrorist network are very dangerous:

But it was the amorphous quality of the network — fluid, rapidly evolving — that made it so difficult to combat. You couldn't infiltrate it. You couldn't listen in on it, except by accident. You couldn't locate it geographically because it wasn't in any one place. In truth, the network represented a radically new kind of opponent, and one that required radically new techniques to combat it. (255)

To combat a terrorist networks is not easy task and they are used against the secure and peaceful societies rendering them helpless, terrorized, and full of a dread of dystopia. They cannot easily be infiltrated or their communications cannot be heard and no technology can accurately locate them in particular geographical region. They are far more advanced in the abuse of science and technology; the abuse of science is far more dangerous for the human society. Science with utopian goal of the betterment of the human future can turn to the vehicle of dystopia as the notion of utopia contains the seeds of dystopia. Both utopia and dystopia are dream and nightmare resulting from same imagination of the future. Gordin, Tilley and Prakash point out the dialectic between them:

The dialectic between the two imaginaries, the dream and the nightmare, also beg for inclusion *together*, something that traditional *Begriffsgeschichte* (conceptual history) would not permit almost by definition. The chief way to differentiate the two phenomena is with an eye to results, since the impulse or desire for a better future is usually present in each. (2)

Traditional conceptual history does not permit to include utopia and dystopia, the dream and nightmare to include together according the Gordin, Tilley and Prakash but both these phenomena contain the impulse for the better future. So, they need inclusion together. Science can be vehicle of both of these conditions.

In the novel, Drake is suspected of funding for those eco-terrorists, abusing the science and technology and creating dystopian condition in the world. Morton withdraws his funding to NERF and works with Kenner and Thapa to thwart the artificial natural disasters created by ELF. Evans and Sarah Jones, Morton's assistant, also join them and they together work to save the life of thousands of innocent people before they are killed by the artificial disasters. In their final mission, Jennifer Haynes also joins the group and they travel to a remote island in the Solomons to stop a tsunami created by ELF. As Drake is finishing the international conference on the catastrophe of global warming the tsunami is planned to hit the coastline of California. The team of Morton and Kenner has to face dangerous crocodiles and cannibalistic tribesmen. These tribesmen catch and eat an environmentalist TV actor named Ted Bradley who comes to that area to spy Morton's team for Drake. To avoid Drake's spying, Morton has faked his death and is outside the team. So, he saves the group. After faking his death, he watches the activities in the island closely before Kenner and the team joins him.

The terrorist activities of the eco-terrorists are directed to terrorize the developed towns like California and lead the developed societies to the dystopic circumstances leading the people worried about their security and future is pointed in the novel:

“California!”

“Right. In about eleven hours.”

Evans frowned. “An undersea landslide . . .”

“Displaces an enormous volume of water very quickly. That is the most common way a tsunami is formed. Once propagated, the wave front will travel right across the Pacific at five hundred miles an hour.”

“Holy shit,” Evans said. (515)

The conversation between Morton and Evans shows that they are targeting California. They plan to use technology and cause underwater landslide that in turn creates the tsunami and hits California. Terrorizing and leading the advanced towns with enormous population is directed to create dystopic world. The gravity of their action and desperateness of Morton and his accomplices show that the condition is really out of control, “There’s no way we can stop them,” Morton said. “We are only four—five, if Kenner makes it, which he doesn’t seem to be doing. There are thirteen of them. Seven on the ship and six on shore. All armed with automatic weapons. (560)” Capturing the terrorists is not easy as they are using sophisticated weapons and gadgets. They outnumber the gang of Morton as they are only four in number; the terrorists are thirteen in number, seven of them on the ship and six are guarding the shore. Morton and company try to stop them at any cost because they are intended to bring evil influence in the society. The radical and seemingly revolutionary acts and solutions are the vehicles for both the thinkers – the utopian and dystopian ones.

Gordin, Tilley and Prakash point out:

After all, utopias and dystopias by definition seek to alter the social order on a fundamental, systemic level. They address root causes and offer revolutionary solutions. This is what makes them recognizable. By foregrounding radical change and by considering utopia and dystopia as linked phenomena, we are able to consider just how ideas, desires, constraints, and effects interact

simultaneously. Utopia, dystopia, chaos: these are not just ways of imagining the future (or the past) but can also be understood as concrete practices through which historically situated actors seek to reimagine their present and transform it into a plausible future. (2)

Both the utopians and dystopian thinkers offer radical, revolutionary solutions to address the problems of the society. They offer the roadmap to the future reimagining the present of the society. In the novel, both the parties, Morton and his accomplices and Drake and the ELF, have their own way to deal with the problem and their own solutions to the problems; the science and technology is used by both of them, first for the betterment of the society and the second, for dismantling the social structure and taking advantage out of dystopic condition.

So, it is common that Morton and company are more at risk. They have to understand the risk and think about the terrorist acts from various angles. Evans points out that the wave goes in circular way and thus, it does not leave only California into turmoil, rather, it would also hit the surrounding areas of the sea. The magnitude of tsunami and the intensity of terror would be greater than expected:

“We’ve been worried about this tsunami wave heading toward the California coast. But a landslide would suck water downward, right? And then it would rise back up again. But that’s kind of like dropping this pebble into this ditch.” He dropped a pebble into a muddy puddle at their feet. “And the wave the pebble generates . . . is circular.”

“It goes in all directions . . .” (562)

Morton and his partners understand the gravity of terrorist activities and thus, they try hard to stop the probability of the dystopic world around them. They risk their life in the course of the operation against them. Jennifer is almost killed by the terrorist and

Evans kills a terrorist. There is a final war between Kenner's team and the elite group of ELF. The terrorist killed by Evans had previously tried to kill him and Sarah Jones in Antarctica. Remaining terrorists are killed by the wave of their own tsunami as it sweeps them to the sea. Kenner and the team try to stop the impact of tsunami and finally become successful to reduce its danger of growing into full-size and causing damage. It does not reach California.

Finally, after the success against ELF, Morton, Evans and Jones return to Los Angeles. Morton opens up a new organization that fights for the environmental cause. The organization is not named in the novel but its goal is to take up environmental activism as a business free of any conflict of interest. Evans quits his firm and joins Morton's organization. Morton hopes that his organization will be taken up well by Evans and Jones after his death.

Morton, Evans and Jones return to Los Angeles. Evans quits the firm to work for Morton's new (unnamed) organization, which will practice environmental activism as a business, free from potential conflicts of interest. He hopes Evans and Jones will take his place in the new organization after his death.

Daniele Fioretti points out that the thinkers of utopian societies are concerned with power politics. They envision the ordered and utopian future and reach the power positions. It is because they want to strengthen and elongate their powerful rule they need to use the dystopic measures like coercion, violence and terror in turn creating the dystopian circumstances instead. Thus, both utopia and dystopia are the products of the power politics:

In his *Leviathan* (1651), Hobbes claimed that all human societies are based not on wisdom but on violence and abuse, because of the substantial aggressiveness of human nature. But, utopians firmly believed that the actual

governments were nothing but a perversion, an estrangement from the positivity of the original human nature. (32)

Fioretti clarifies the power politics in the notion of utopia in Hobbsian terms. Utopia is generally regarded as the matter of wisdom and the wise leaders of the society. But all human societies are not based on wisdom rather they are based on violence and abuse and the utopian rulers and government turn aggressive to maintain their power. Utopians believe that the governments are generally based on perversion and estrangement of positivity of the human nature. By charging the government about perversion, they gain the power and after that, they follow the same perversion to maintain their power, ultimately leading the state and the society to dystopic circumstances unlike their utopian beliefs. In the novel, Crichton has shown that Drake and ELF are abusing the science and technology for the material power or monetary gain manipulating the issues regarding climate change and global warming and projecting human future as bleak and disordered. But thanks to the conscious efforts of Morton, Kenner and company, the humanity is saved from the coercive measures taken by the eco-terrorists. This power politics behind the abuse of science and technology has been the chief concern of the novelist in his novel.

To sum up, Crichton's novel presents how the human society can be turned dystopic with the abuse of science and technology by handful of elite people because they understand science and technology while general public has only the faith that science and technology will create utopian and prosperous human society because they do not understand it. We see that the data on climate change and global warming are manipulated and the science and technology is abused for the monetary gain by Drake and ELF. It is the horrible side of the science that can create a dystopic future rather than creating the utopian and prosperous society.

Talking about twentieth century dystopian fiction, Erika Gottlieb states, “the world of dystopian fiction presents us with a society where the ruling elite deliberately subverts justice” and thus, “twentieth-century dystopian fiction can be seen as a protest against the totalitarian superstate . . . a universe of terror and rigged trials” (1). She further discusses the significance of dystopian fiction with reference to the dystopian fictions of Zamiatin, Huxley, and Orwell and points out that dystopian fiction has got a major significance that is to warn the mankind about the possible dangers to the human society in the coming future. She writes:

The strategies of Zamiatin, Huxley, and Orwell are also significantly the strategies of warning. As readers we are made to contemplate Zamiatin’s One State, Huxley’s World State, and Orwell’s Oceania, each a hellscape from which the inhabitants can no longer return, so that we realize what the flaws of our own society may lead to for the next generations unless we try to eradicate these flaws today. (4)

The hellish worlds depicted by the popular dystopian fictions let the readers and policymakers equally aware about the flaws of our society that may lead our future generation to the dystopian condition if we do not become careful at present to improve the flaws. Dystopian fiction thus, has played a corrective function and always wanted the world be a better place to live.

Michael Crichton’s dystopian novel *State of Fear* has played similar role. It has shown the possible abuse of science and technology and the areas where science and technology can go wrong and the areas where it must be corrected; how some of the power-monger elites of the society can manipulate the scientific data and misuse the science for their personal gain. It is easy because science is in the hands of few rich and powerful elites and ordinary people do not understand how it is working.

Ordinary people are helpless to have faith that science and technology is being used on the behalf of mankind and the utopian society; mankind has to believe on the morality and honesty of the scientist and they have that no knowledge that it can be detrimental to human society. Gottlieb points out that dystopian fiction are the copies of morality play in theme and underlying structure setting a moral code for particular persons or groups of the society that have got the possibility to change the course of the human society:

The correspondence between religious and secular concepts in dystopian fiction is still so strongly felt that, if we examine *Nineteen Eighty-four* closely as the prototype of the genre, twentieth-century dystopian fiction reveals the underlying structure of a morality play. Orwell's protagonist, a modern Everyman, struggles for his soul against a Bad Angel; he struggles for the dignity of the Spirit of Man against the dehumanizing forces of totalitarian dictatorship. (4)

Gottlieb has clearly observed that the secular concept of dystopian fiction emerged from the same underlying structure of morality plays that were essentially religious in their themes. The underlying structure of Orwell's dystopian novel *Nineteen Eighty-Four* is compared to a classical morality play and the protagonist of the novel with the character Everyman who struggles to save his soul from a Bad Angel in the play. Orwell struggles to save the modern protagonist's soul from the dehumanizing forces of totalitarian dictatorship. The morality should prevail on the persons and groups that can shape the future of the society and they must behave rationally if the society must be saved from dystopian condition is the major theme of Crichton's *State of Fear*. Strong morality and rationality are expected from the scientists and the powerful elites like Drake, so that the science could be used for the betterment of the society. The

novel gives a strong message that if science becomes merely a tool to fulfill powerful people's personal interests, dystopian future is unavoidable.

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