

Ecological Dystopia in Paulo Bacigalupi's *The Water Knife*

This research deals with the environmental issues in Bacigalupi's *The Water Knife*. It portrays the importance of natural resources in human life for the continuation of the ecological system. It celebrates the significance of nature for human existence. While the ecological crisis appears in nature, all human and non-human beings get suffered. In the case of suffering, it is recognize that women are more victimizes or face higher degree of sufferings than the men. The women come to be the main victim of the ecological crisis as shown in the novel. The story is set out the reality of the twenty first century in the contexts of severe climate change and water scarcity on Southwest.

The novel is a science-fiction novel which offers constant look at what happens if we stay on course. In a near-future United States, where the southwestern states compete with each other for access to a reliable water supply during a period of extended and terrible drought. The novel is related in the past tense from a third-person omniscient narrator and alternates between focusing on the perspectives of its three central characters as Angel, Lucy, and Maria. Angel Velasquez, the "water knife" person who gives the book its name. He works as an undercover agent for the state of Nevada, sensitive and damaging the water supplies of rival states. At the start of the novel, Angel is send to Phoenix, Arizona, by his boss Catherine Case to investigate some mysterious incidents in the city.

Catherine Case takes the authority of Southern Nevada water sources. She creates the obstacle of water supply to the poor farmers and neighborhood through the help of water knife Angel to send for investigation. Nobody could get a drop of water. As a result ecological system is going to be unbalanced in the environment. People are facing the many problems of ecological crisis, global warming, dust and drought

everywhere. Likewise, the narrator drives other two dominant character Lucy Monroe a journalist, who reports on corruption and conspiracy surrounding the Taiyuan a Chinese funded ecology in the middle to know that refugee numbered in the hundreds of thousands and yet still for survive. Other person, Maria Villarosa, a teenager refugee from Texas struggles to survive on subversive streets of Phoenix. The scarcity of water brings various problems in environment day-by-day as the women get more suffered therefore they move from one place to another searching for survive.

Human beings are the part of nature. People are seeking the existence of life in the lap of nature. Nature and human beings are interconnected with each other. But, the loss of water resources the entire environmental sources are going to destroyed. Through the ecological and environmental crisis southwest is turned by the kind of disorder, law breaking and violence.

Lucy Monroe, a journalist, who lives in Phoenix. After discovering that her friend Jamie has been murdered after he becomes involve in a shady scheme to sell water rights, she fears that Jamie's killers would come after her next. Maria, a teenage refugee from the evacuate state of Texas, is living in Phoenix with her best friend Sarah. After a business scheme to sell water at a construction site go wrong, Maria and Sarah finds themselves in debt to a local gangster known as 'The Vet.'

When Angel arrives in Phoenix he meet up with his colleague Julio who explains that one of his contacts in the Phoenix Water Board had been cruelly murdered. The two men go to the funeral home where they meet journalist Lucy Monroe who is investigating the death of someone who has been tortured in a similar way to Julio's colleague. Angel feel a powerful connection with Lucy who motivates him to let her leave even though she might have has information that he needed.

Lucy discovers that her friend Jamie is doing business with a man name

Michael Ratan, who lives in a luxurious apartment building the Taiyang Arcology in Phoenix. Meanwhile, Maria and Sarah decide to have sex with Ratan so that he would pay them enough money to cover their rent and escape the wrath of The Vet. The morning after the girls sleep with Ratan, two men broke into Ratan's apartment, murdering Ratan and Sarah while Maria hides under the bed. Lucy comes to the apartment while the men are still there and they kidnap her. Angel arrives and interrogates Maria about what has happened to Lucy. Angel let Maria keep a book that she finds in Ratan's apartment.

The clues give to Angel by Maria then Angel realizes that his colleague Julio is double-crossing him and has kidnapped Lucy. Angel tracks him down and saves Lucy from being tortured. Angel and Lucy shares what they know about the water rights Jamie and Michael Ratan has been trying to sell. Lucy and Angel hide together in a Phoenix slum, during which time a sexual/romantic relationship began between the pair.

Lucy continues trying to investigate the mysterious water rights but is interrupt by agents from California who threaten to kill Lucy's sister Anna and her children if Lucy doesn't agree to betray Angel and turn him over to California. Lucy led Angel into an ambush at a gas station, but he escapes. A group of dissatisfied and mistreats Texan refugees become involved in the fight, having mistaken Lucy and Angel for fellow Texans, leading to a fire which quickly spread across the whole of Phoenix. Using the Texans and the fire as cover from the Californians, Lucy tracks down the wounds Angel and saves his life.

Angel realizes that his boss Catherine Case orders his murder because she mistakenly believes he stole the water rights. Case agrees that she would let Angel live if he finds the rights and brought them to Nevada. Angel realizes that the rights

are put inside the book that Maria has taken from Ratan's apartment. Angel and Lucy find Maria in Carver City, where she is trying to cross the state border. Maria needs to escape Arizona because The Vet is going to kill her after she fails to pay him the money she owes.

Angel tells Maria that if she gives him the water rights he would take her to live in Las Vegas, where she would be safe. When Lucy read the water rights she realizes that they could save Phoenix from being destroyed, so she decides to take the documents back to Arizona despite the suffering this would cause for Angel.

Unwilling to lose her one chance to escape Arizona, Maria shot Lucy, allowing Angel to regain possession of the water rights. Maria sits on the riverbank listening to helicopters approaching which would take all three of them to Nevada. Angel Velasquez lives in Las Vegas in a near-future United States of America in which the southwestern states of California, Arizona, and Nevada competed with each other for an ever-dwindling water supply during a historic period of drought. Angel works as a "water knife," a covert agent from Nevada sent to infiltrate and sabotage the water supplies of other states.

Paulo Bacigalupi is born August 6, 1972 who is an American science fiction and fantasy writer. He has won the so many awards such as Hugo, Nebula, Compton Crook, Theodore Sturgeon and Michael L. Printz awards. He was nominated for the National Book Award. His fiction has appeared in *The Magazine of Fantasy & Science Fiction*, *Asimov's Science Fiction*, and the environmental journal *High Country News*. His non-fiction essays have appeared in Salon.com and *High Country News*, and have been syndicated in newspapers including the *Idaho Statesman*, the *Albuquerque Journal*, and the *Salt Lake Tribune*. He is a Webmaster for High Country News starting in 2003.

His short fiction has been collected in *Pump Six and Other Stories*. His debut novel *The Windup Girl*, published by Night Shade Books in September 2009, won the Hugo, Nebula, and John W. Campbell Memorial Awards in 2010. *The Windup Girl* was also named by *Time* as one of the Top 10 Books of 2009. *Ship Breaker*, published by Little, Brown in 2010, was awarded the Michael L. Printz Award for best young adult novel and was nominated for the National Book Award for Young People's Literature.

The novel portrays the ecological crisis, climate change and socio-economic breakdown of South West America through the cause of water scarcity. It means the term ecology is the interaction between the group of living things and their natural environment. If some kind of disaster appears in nature, the whole ecological system human and non-human beings are captured. Women are the part of nature so they always are near to the nature. They share their sweats, pain, and grief emotion, happiness with in nature. While some kind of crisis and disaster hit in the nature, the women get more suffers from the difficulties. In this novel, many female characters are captures from the different trouble but they are not be unsatisfied always be ready to face the problems and struggle against the difficulties.

It is the study of environmental issues, which portrays the importance of natural resources in human life for the continuation of the ecological system. While some kind of crisis appears in nature, all human and non-human beings get sufferers. But, we can recognize that women are more victimized or face higher degree of sufferings than the men. The main nature lover groups of people, the women; themselves come to be the main victim of the ecological crisis as shown in the novel.

The novel deals with the environmental matters with literature. The setting of this novel is Phoenix and Arizona where he imagines the futuristic picture of

southwest America. It takes the place where drought dust and climate Change has devastated with in the cause of water scarcity and ecological crisis. Many critics view that can be built to prove the ecological dystopia:

There were stories in sweat. The sweat of a woman bent double in an onion field, working fourteen hours under the hot sun, was different from the sweat of a man as he approached a checkpoint in Mexico, praying to La Santa Merete that the federals weren't on the payroll of the enemies he was fleeing.

(11)

This line presents the women's condition with in the crisis period. According to the writer Lawrence Bull, for the first two centuries of settlement, American environmental thought remained millennial rather than apocalyptic, driven by the vision of wilderness, as an inexhaustible resource waiting to be transformed into the deserts shall blossom as the rose. Only by gradual degrees, during the nineteenth century, the sense of environmental endangerment gather force and began to challenge this gospel of plenty, indeed, only during the past two or three decades, and scarcely even then, have larger numbers of Americans declared themselves willing to curtail their taste for abundance to alleviate pressure on the environment.

In the drought-stricken the novel, the state of Arizona has less senior water rights than do Las Vegas and California, so the bounty of the Colorado River goes west and zoners go without. Dave Burdick in his journal *The Denver Post* writes that:

The Water Knife is the dark, action-packed story of a hired gun getting tangled up with a scrappy young girl and a semi-idealistic journalist in the catastrophically water-starved American Southwest of the not-so-distant future. By now, we know what Paonia-based, Hugo- and Nebula-winning author Paolo Bacigalupi's dystopian future looks like. He has described it in different

settings in his several novels, even dating back to his short story “The Tamarisk Hunter,” which occupies the same world as “*The Water Knife*.” That story was published in High Country News in 2006, with the disconcertingly near setting of 2030. (41)

According to Ben Babcock’s views that, Novel works so well is because it feels true. It’s not what will happen, but it’s what could happen because it’s very similar to how our world is now: the rich use their money to insulate themselves from upheaval while the middle class become poor and the poor get dead. He is a future of resource scarcity, of distant, comfortable haves, multitudinous, ubiquitous, haves -nots, of corruption, betrayal, violence and nihilism. It is usually only a slight exaggeration, in other words, of the time he lives in a pessimist’s forecast.

Similarly, according to Cheryll Glotfelty, in philosophy, various subfields like environmental ethics, deep ecology, eco-feminism, and social ecology have emerged in an effort to understand and critique the root cause of environmental degradation and to formulate an alternative view of existence that would provide an ethical and conceptual foundation for right relations with the earth. As he writes:

The only difference between phoenix and a dozen dying cities in Texas and Alabama and every coastal City around the world was that Phoenix had taken hits not pm from climate and dust storms and fires and droughts but also from a competing city. (178)

This line represents the effects of water scarcity, Likewise by Dave Burdick.

Bacigalupi imagines a future scarcity resources of distant comfortable haves multitudinous, ubiquitous haves not of corruption betrayal and nihilism it is usually only a slight exaggeration in other words of the time he live in a pessimistic forecast.

Similarly, for Kirkus, The frightening details of how the World might suffer from

catastrophic drought are vividly imagined.

The way the novel's environmental nightmare affects society, as individuals and larger entities both official and criminal vie for a limited and essential resource, feels solid, plausible, and disturbingly believable. The dust storm, Texas refugees, skyrocketing murder rate, and momentary hysteria of a public ravenous for quick hits of sensational news seem like logical extensions of our current reality. An absorbing thriller full of violent action, it represents the dystopia of the novel. Likewise, in the dust room Lucy strapped on an REI filter mask and goggles desert adventure pro-care package gift from her sister Anna the year before: "She took final breath of clean air, then plowed out into the storm with her camera wrapped securely in plastic" (40). This line represents the condition of southwest. Another author Jason Heller says that *The Water Knife* trickle down dystopia deregulation, privatization and concentration of power in the hands of the few might take strange new shapes in the coming decades.

Similarly, Maria stares at the women, trying to understand what made all these people see the world the way they did "Because I'm not going back to phoenix" (461). This line represents the poor refugee women are frustrated in phoenix. In this way the researcher has raised the novel's contemporary issues of ecological crisis, global warming, climate change brings the ecological dystopia whereas marginalize, subaltern and women were more exploited from exploited from socioeconomic and environmental crisis in southwest America. This novel is the interaction between humans and their natural environment whereas women and nature are united in their oppressive and exploited patriarchal western society. The ecological crisis, climate change and water scarcity are the main environmental crisis are main issues of the novel. The women are more suffers through this crisis. Women spend most of the

time and are closed with nature for their shelter in this dominated society. So, they were more suffered or irritated by the natural destruction.

In this way everywhere women are the first to protest and activist against the environmental destruction. Similarly, in this novel Lucy, Maria and other women who are more victimizes from the difficulties so they try to do control the crisis. Lucy describes enough stones about population or refugee's difficulties who, move for survive. Maria starts to control the problem of water scarcity by selling the bottles of water. The novel deals the relationship of the physical environmental issues from an interdisciplinary point of view where it exemplify environmental concern the various ways texts treats the subject of nature. This text explores the movement that sees a connection between the exploitation and degradation of the natural world and subordination and oppression women in patriarchal society. It helps to explore the real picture of women and women's relationship with nature.

Women are exploited and dominated in patriarchal society so they searching the shelter in nature. In this way women are close and spend much time in nature. So they are suffering and displaced while the crisis appear in the environment. In everywhere women is the first to protest and activist against the environmental destruction. Similarly, in this novel the cooperative of women are to control the ecological crisis. Lucy and Maria is involves from their field to decrease the environmental crisis. Lucy writes the profitable stories about the refugee who come for survive. Maria provides the service of Water who, were in thirsty. In this way in this novel women have a great contribution to solve the great problem.

The researcher makes use of the tool of environmental apocalypse and ecological insight into the shifting nature of nature-human relation. The root cause of environmental destruction, in the words of William Morris, is the competitive

commerce which only focuses on profit. Man gains something in the expense of the other man. Competitive commerce kills the original art and happiness. Man spreads the foolish whim just to get a lot profit. So, Morris names competitive commerce as commercial war. Commercial war does not think the betterment of labor. It kills the cheerfulness and simplicity. It gives birth to mechanical inventions which instead of giving ease to the human labor are oriented just to make profit. To support the verification Morris writes:

And all that mastery over the powers of nature which the last hundred years or less have given us: what has it done for us under this system? In the opinion of John Stuart Mill, it was doubtful if all the mechanical inventions of modern times have done nothing to lighten the toil of labor, to be sure there is his doubt that they were not made for that end, but to make profit. (33)

The above extract clears that the commercial war is against the environment and its progress. The mechanical invention and discoveries are not for strengthening the biosphere but they are for bringing the disorder. Morris states the three main things as due necessities for a good citizens as honorable and fitting work, healthy fitting house and sufficient leisure. But the human beings ignoring the necessities dominate the environment for their benefit. In the name of being enlightened, human beings are changing their life style which invites natural destruction.

Aldo Leopold's ethical sequence clearly projects that human beings are restricted from doing anti-social activities in the name of struggling for existence. They are further restricted to do anti-natural activities in name of earning profit. If human beings continue anti-natural activities, which will not only destroy nature but also the whole biosphere will face apocalyptic doom. The land ethic simply enlarges the boundaries of the community to include soils, waters, plants and animals or

collectively: the land. Similarly, it opines that the human history is developing slowly and gradually from simple to complex. They are conducting the competition of consuming nature where all are participants and they are self-defeating. So mocking those activities Leopold writes:

The farmers who clears the woods off a seventy five percent slope turns his cows into the clearing and dumps its rainfall, rocks and soil into the community creek, is still a respected member of society. If he puts lime on his field and plants his crops on contour, he is still entitled to all the privileges and emoluments of his soil conservation district. (437)

In the given extract Leopold makes his idea clear to his reader that human beings of modern era are in the race of over consumption of nature. They evaluate a person as a good person who can use the nature in optimum level to earn profit. But in the eye of eco-critic the maximum use of nature is not good. It makes the future of the world unpleasant. In order to save the biosphere from apocalyptic deep ecologist opines that human beings need to give up the use of modern technology.

This thesis has been divided into three chapters. In the first chapter, the researcher introduces the topic, elaborates the hypothesis, and quotes different critics' views regarding to the text. In the same chapter, the researcher shows the departure also. The second chapter deals with the theory of dystopia and makes a thorough analysis of the text. The last chapter contains the conclusive ending of the research.

This research moves round the issue of environmental hazards and pitfalls which arise from human beings' irresponsible and short-term activities. This novel presents how aggressive human activities attitude threat to the ecological integrity and how brings environmentally disastrous condition for human being. If ecological integrity breaks down, human existences would face serious threats and dangers.

The degrading environmental condition calls into question the permanence and continuity of human existence. When the existence of human being faces serious limitations, human beings would be really at a loss. The upsetting and traumatic effect of ecological degradation is explored in Bacigalupi *The Water Knife*.

The degrading condition resulting from environmental harms would create dystopian world. In a near-future west overwhelmed by climate change, the Rockies are nearly bare of snow, the Colorado River tapped dry long before it reaches Mexico. California is buying up upstream water rights as Nevada and Arizona battle it out for the remaining trickle. The wicked witch of this west is Catherine Case, head of the Southern Nevada Water Authority, who sends helicopter shock troops commanded by water knife Angel Velasquez to bomb a small city's water treatment plant. These Chinese designed, terrarium-like skyscrapers for the one percent recycle water so efficiently, through clever microbe and algae filters, that they can support koi ponds and jungles and still self-sustain for three months. The rich and powerful silo themselves and leave everyone else to decay.

Phoenix a city that never has any ecological right to exist has clung on through a straw of water from Lake Havasu, but it is dying a slow and gruesome death. Lucy, a journalist who comes to Phoenix to peddle disaster porn to the blood rag tabloids, but finds herself invested, writing Pulitzer-nominated stories no one reads on what is happening to the losers in the West's water wars.

The researcher makes use of the tool of environmental apocalypticism. The fear and insecurity felt the survivor of terror is examined in the light of the theoretical insight of eco-dystopia. Lawrence Buell is the leading theorist of ecological apocalypticism. He has given his view on eco-dystopia. His view is cited below:

Today's prairie is tomorrow's metropolis. Just as the American government

magisterially quartered the land into rectilinear sections, we can build our own world. But the author also suggests that today's efforts of civilization are tomorrow's (environmental) disasters-not his intended meaning, but an inference that Marsh would have drawn in an instant. To turn utopia into dystopia we need only to deny the environment's malleability. (308)

The above lines cite from *Environmental Apocalypticism* by Lawrence Buel underscore the point that the polity formed out of anthropocentricism remains antagonistic to the sustainable environment. In other works, human centric policy causes damage to the environment that sustains human and non-human species.

Angel watched Lucy as she leaves the morgue and wonders what she makes him decide to let her go. The following line presents:

“You sure they're Calies? Maybe they're real CID.”

Julio elbowed Angel impatiently. “Hell yes, I'm sure. I got cams on Ibis, and those guys are in and out of the headquarters all the time”

“That company might as well be a Cali embassy.” (119)

Julio points out two men from California (Calies) who are also posing as CID. They are examining the same bodies that Julio and Angel had come to see. Terrified, Julio leave the morgue, but Angel stays. He speaks to Timo the photographer who gives him Lucy's name and phone number. Christine Ma points Angel out to the Calies. They chase Angel but he escapes.

Natural destruction is sure due to modern enlightenment philosophy. Stating in ‘The Logic of Domination’ that the enlightenment is the product of myth, Theodor W Adorno and Max Horkheimer opine that the same enlightenment victimizes the myth. Enlightenment treats the myth and nature as man's extracts how enlightenment victimizes the myth:

Myth turns into enlightenment, and nature into more objectivity. Men pay for the increase of their power with alienation from that over which they exercise their power. Enlightenment behaves towards things as a dictator towards men. He knows them in so far as he can manipulate them. The man of science knows things so far as he can manipulate them. In this way their potentiality is turned to his own end. (77)

The environment of myth tells that mind is able to understand the world because it is also a part of world. After knowing world men become enlightened. Enlightenment suppresses the environment and explains the environment in terms of man's resource to achieve their target.

The losers are mostly Texans, who find themselves on the wrong side of a border on land that makes unlivable by drought, and are scrambling to get north. Texans are the dirty who can't afford even a sponge bath. The refugees huddle around the trickle of the charity water pumps the prostitutes who cater to Chinese developers. The dead bodies in swimming pools or strung up on border fences by Nevada militias. Like the displaced of today, they pay their life savings to walk hundreds of miles across a desert. In one chilling scene, hundreds of Texan bodies turn up in the desert coyotes has been taking their money and leaving them to die. This novel talks about what people do to survive. Most of the characters are soulless scribblers for advantage.

Maria, a teenage Texan refugee, is the survival instinct personified. She pities those with old eyes, like Lucy, who thinks the world is supposed to be one way, but it's not. She hardens, eventually shooting someone in the back to get to Vegas. The characters think back bitterly to what could have been done differently. It shows that intensifying the scarcity, displacement, stratification and ecological

devastation that are already underway. Between 2012 and 2014, the group Texas Border Volunteers counted 259 dead migrant bodies in the desert of a single Texas county.

In the not-too-distant future, climate change turns the Colorado River Basin into a dust bowl. California, Nevada and Arizona wage hot and cold war over aquifers, dams and water rights. The wealthiest one percentage people lives in lush, self-sustaining arcologies while the cities and suburbs of old are riddled with crime and desperation. California is the upper hand thanks to foreign water corporations, and Arizona is a militarized backwater. But the most powerful woman in Las Vegas Catherine Case keeps a secret weapon named Angel Velasquez. He's one of her water knives, soldiers trained to secure fresh water resources by any means necessary.

Lawrence Buell maintains that Toxin discourse is most significant aspect of eco-criticism. He assumes that Toxin brings catastrophic condition. Throwing the spotlight on the harm of toxic, Lawrence Buell writes:

Toxin concern is not new, of course, but it is closely linked to recent events in the history of postindustrial imagination that ensured that the environmental apocalypticism activated by Hiroshima and Nagasaki would out last the cold war. Wendt's won particular version of toxic discourse is both anticipatory and confirmatory, combining repressed fears of nuclear annihilation with post-apocalyptic sounding of the despair and anger that follow on disastrous nuclear events. (56)

The use of toxin leads to the disintegration of environmental integrity and purity. It hastens the outbreak of apocalypticism. The threat of nuclear annihilation contributes to the looming doom of human beings' some of the precious achievement. The

nuclear weapons must be dealt with in order to defend the biosphere of the earth.

Maria wakes up in Ratan's apartment. A scarred man is standing over her. He offers her a drink some water and asks what is happening in the apartment. The following line exemplifies:

The vision faded, replaced by a brutal-looking man, scarred and wearing a ballistic jacket. Behind him the sun blazed, haloing him in red light, burning over Phoenix, tinted to amber as it shone through the autofilters of the apartment's floor-to-ceiling windows. (196)

Maria explains that the man has killed Ratan and Sarah while she hides under the bed. The man asks if there has been another woman there and Maria replies that the man has taken her away. The man explains that he has been following the woman. He leaves Maria alone in the apartment.

The Green language of Raymond William takes reference of romantic poets and talks about the separation of possession on nature of human beings. Conscious citizens must not learn to control on nature. If men seek to control on land that result the natural destruction. According to Raymond William, man is not the possessor of world but wonderful child. He further talks that there are two principles of nature. First, nature that regulates the human activities and control becomes the principle of order. Second, nature which teaches us the truth of our own sympathetic nature becomes the principles of creation:

This active sympathy is the real change of mind, the new consciousness if only in minority, in the very period in which the willed transformation of nature, not only the land and water but of its raw materials and its essential elements was to enter a new phase, in the process we now call industrial. The agrarian confidence of the eighteenth century had been counterpointed by feeling of

loss and melancholy and regret: from the ambivalence of Thomson to the despair of goldsmith. (51)

In the given literary piece, we can clearly see that the principle of creation makes man well known about the nature and active sympathy brings the real change in human consciousness. Then human beings transformed the nature in excessive rate. They use each and every thing of the nature to achieve their goal. Over consumption of nature causes the destruction of the world. In modern era, age of industrialization is introduced for maximum utilization of natural resources.

Angel is sent to investigate a potentially game-changing source of water in the most unlikely of places Phoenix. There, his fate becomes entwined with those of a determined journalist and a teenage refugee from Texas. Together, they follow the trail of a near-mythical artifact that could shift the balance of power in the war for water. The nightmarish vision of a dystopian America ruined by greed, bureaucracy and environmental disaster is both horrifying and prescient. This novel is a thoughtful, frightening, and all-too-likely vision of the future.

This novel is an inorganic substance without which human life wouldn't exist: H₂O. This novel hits closer to home for U.S. readers. Its setting is the American Southwest, at a time in the near future when Britney Spears is toothless and old, the country is plagued by climactic calamities and the Southwest's dwindling water supply is control by robber barons. The federal government is severely weakened by corporate influence; the drought-stricken Western states have formed their own militias and shut down their borders. In the midst of this poverty and tragedy, though, massive resorts are being constructed across the parched landscape, ones that flaunt their water-wealth in the face of exploits workers and gross ecological disparity.

The growing vulnerability of ecosystem is the widespread problem of the world. The changes that are found in the structure of environment stand for the imminent danger and disaster. Regarding to anxiety arising from degrading environmental condition makes the following view:

Important changes in many species populations, including extinctions, are well known. Inadvertent or deliberate simplifications of ecosystems with a resulting decrease in stability and tolerance of environmental stress have occurred many times. The transfer of natural ecosystems to monocultural agricultural systems constitutes the best examples of ecosystem simplification which now need continuous management to preserve the desired state. In some cases whole ecosystems have been completely replaced by new ones because of intensive pollution or grazing by domestic animals. (67)

Climate change produces adverse effects on agricultural productivity. These things are of special concern because any factor that tends to decrease the production of food and fiber. Environmental issue must receive a high priority in the monitoring system. To arrive at the optimal combination of exploitation and management of natural resources, program must be developed that provide continuous information on the use of these resources.

When Maria saw Esteban and Cato, she runs inside and locks the door.

Toomie hits the pavement with a hard thud. Esteban and Cato pull Toomie up to the door. The following line presents the condition of Toomie:

Blood ran from Toomie's temple. His lips were split from beatings, and one eye was swollen shut. The two thugs had his hands zip-tied behind his back. They dragged him up to the doorstep and threw him down on the concrete..... Esteban put a gun to Toomie's knee and pulled the trigger.

Toomie withed behind him on the concrete. (272-73)

It shows that Esteban threatens to kill Toomie unless Maria turns herself in to The Vet as punishment for not paying her rent. Toomie begs her not to leave with Esteban, but she does. At The Vet's compound, the men there force her hand into the hyena cage and the hyenas ripped off two of her fingers.

Industrialization brings rapid change in the environment. Raymond William takes reference of Clare to convey his ideas that due to human activity everything in the nature is changing. The forest is being cleared. The brooks are being dry. The fertile land is being deserted day by day and the beauty of nature is challenged. When a man falls on greed of wealth, he forgets the beauty of nature. He only sees nature as one of the sources to make money. He uses it to achieve his goal of making money which causes the destruction of nature. The destruction of nature invites the destruction of our labor and ultimately human race too. To support this researcher cites the following extract of Clare from the green language of Raymond William:

Accursed wealth! Over-bounding human laws,
Of every evil thou remain the cause:
Victims of want, those wretches such as me,
Too truly lay their wretchedness to thee:
Thou are the bar that keeps from being fed,
And there is thy loss of labor and of breed (54)

Human beings are breaking the set of law of nature or we can say, we are committing mistakes due to greed of money. Human beings are destroying nature to make money. Human beings forget to think about nature, its preservation and development too. Aldo Leopald presents the ideas about the wild life management traditionally. He gives more focus on generating more profit and ignores the value of land and other

environmental aspects which focus on reducing the number of predators that seems to pose the threat on live-stocks. The act of threatening the existence of any species and plants of universe can be named anti-social activities.

Richard Kerridge's definition in the mainly British *Writing the Environment* (1998) suggests, like Glotfelty's, a broad cultural ecocriticism:

The ecocritic wants to track environmental ideas and representations wherever they appear, to see more clearly a debate which seems to be taking place, often part-concealed, in a great many cultural spaces. Most of all, ecocriticism seeks to evaluate texts and ideas in terms of their coherence and usefulness as responses to environmental crisis. (5)

We will have reason to question the monolithic conception of 'environmental crisis' implied here, and perhaps to resist the evaluation of 'texts and ideas' against a seemingly secure ecological yardstick: both as a science and as a socio-political movement, 'ecology' itself is shifting and contested. However, the emphasis on the moral and political orientation of the ecocritic and the broad specification of the field of study are essential.

Angel hallucinates having a conversation with his mother when he is a child. He then dreams another conversation with a sicario (assassin) whom Angel encounters when he was a child. The conversation is about how dangerous it is when a woman feels betrayed. Angel wakes up and finds Lucy by his bedside. Angel tells Lucy he thinks Catherine Case orders his death. Angel guides Lucy to drive them both to one of the water knives' safe houses in Phoenix. The following lines show:

"Shhhhhh," he said when she tried to question him again. "Listen," he whispered. "They are coming. They're coming for me." He sounded almost reverent.

“I don’t ...”

It came first as a whisper. A buzz high above, growing, and then suddenly shrieking. (328)

The above extract shows the destruction of all the things and flames. Angel calls in his location to his superiors and then he and Lucy hide in another house around the corner. Shortly afterwards, the safe house was bombed by helicopters.

Leopold is of the opinion that human beings are prevented from doing anti-social activities for existence. They are denied a chance to indulge in anti-natural activities. These activities will not only spoil nature but also the whole biosphere. Aggressive acts will pose apocalyptic doom. Ethics to protect environment simply enlarges the periphery of the community. Human history is growing from simple to complex. The growing civilization compels people to conduct the competition of consuming nature. With a view to make a mockery of such activities, Leopold writes:

The farmers who clears the woods off a seventy five percent slope, turns his cows into the clearing and dumps its rainfall, rocks, and soil into the community creek, is still a respected member of society. If he puts lime on his field and plants his crops on contour, he is still entitled to all the privileges and emoluments of his soil conservation district. (437)

It is obviously clear that human beings of modern era are in the race of over consumption of nature. They are not genuinely concerned with the idea of using resources in a sustainable way. They appraise a person as a good person who can use the nature in optimum level to earn profit. Such selfishness incurs the possibility of doom and devastation. But many eco-critics argue that the maximum use of nature is not good. They suggest that to save the biosphere from apocalypse, human beings should abandon the overconsumption of modern technology, and avarice of money.

When Angel is ordered to travel to Phoenix as part of an SNWA investigation into a possible new water source, he crosses paths with Lucy, who's probing the mysterious murder of her idealistic friend Jamie. In the middle of all this is Maria Villarosa, a young Texan refugee who gets caught up in a storm of violence, drugs, prostitution, torn loyalties and secret water rights that could dramatically shift the balance of power as well as the quality of life everywhere west of the Rockies.

The time frame is the indeterminate near future, as the American West and Southwest, along with an offstage Mexico, struggle to survive the drastic diminishment of all water resources. Rivers run shallow, rain does not come, and aquifers go dry. Cities are hollowed out, refugees hit the road, and the rich end up in sustainable arcologies, vast hermetic structures whose luxurious interiors rely on recycling, conservation and the ruthless, quasi-legal arrogation of any and all water rights. Angel Velasquez is the "water knife" of the title, a canny, deadly cat's paw for Catherine Case, the queen of Nevada water dealings. Next is Lucy Monroe, a freelance Internet journalist chronicling the slow demise of Phoenix, Arizona. Angel is in Phoenix, investigating the death of someone for his employer, and meets Lucy at the morgue. He immediately senses her entanglement in the affairs that interest him and wrangles a tense meeting with her.

The notion regarding environmental apocalypticism is the decisive component of the methodological basis of this research. The concept of ecological dystopia is useful to describing the situation of a woman who is forced to dwell in a critical situation. Ecological concern is perceived by Howarth as shock to the connection between man and nature. The researcher states the view of environmentalists. Environmentalists talk about nature and its preservation. Environmentalists concentrate on their study about consuming nature and natural resources. Talking

about environmentalist and their principle of study, William Howarth writes:

Environmentalists are those who believe that the degradation of nature may be reversed by a combination of regulation, restraint, less toxic and wasteful mode of production, and various form of technologically engineered-including genetically and bioengineered- intervention. (37)

Environmentalists follow the principle of anthropocentrism. They treat human beings as the centre of their study. Environmentalists maintain that should be managed to benefit human beings by causing less harm on nature. Contrary to this view, eco-criticism gives emphasis to the preservation of nature.

Angel Velasquez lives in Las Vegas in a near-future United States of America in which the southwestern states of California, Arizona, and Nevada competed with each other for an ever-dwindling water supply during a historic period of drought. Angel worked as a “water knife,” a covert agent from Nevada sent to infiltrate and sabotage the water supplies of other states. The following line shows that what Angel does when he reached to the Arizona:

Angel sighed. “I just knew you’d be stand- up that way.”

Before Yu could retort, Angel grabbed him and slammed him to the floor. He buried a knee in the bureaucrat’s back. Grabbed an arm and twisted it.

“You are destroying.”

“Yeah, yeah I know.” (15)

The above lines present Angel’s impotent to stop the destruction of the world. In the flickering light of the explosions he could make out tear on the man’s face. Angel’s boss, Catherine Case, instructs Angel to fly to Carver City in Arizona and destroy the headquarters of the city’s water supply. Angel obeys her orders, cutting off the water supply of more than a hundred thousand people.

The noted eco-feminist Val Plumwood establishes connection between masculinist human attitude and ecological imperialism. By doing so, he proves that enlightenment culture of European imperialism generate ruinous effect in the biophysical limit of the planet. By the same token, ecological imperialism is environmental racism. Environmental racism is described as the connection of race and environment. The operation of race is connected to the operation of environment. Environmental racism has positive effect too. Plumwood calls it hegemonic. The following lines show the vision of Plumwood about environmental racism:

Above all else, those environmental racism is an extreme form of what Plumwood calls hegemonic centrism-the self-privileging view that she sees as underlying racism, sexism and colonization alike, all of which support and reconfirm each other, and all of which have historically been conscripted for the purposes of exploiting nature while minimizing non-human claims to a shared earth. (5)

Plumwood's claim of eco-feminizing nature is manifested in the above-cited extract. He holds the view that human is against the natural order. They are under the illusion that they are the best creatures of the cosmos. Specifically, European inhabitants think they are masterminded. But it is illusion only. They only know how to exploit rapaciously natural resources.

Angel Velazquez is a former gang member turns "water knife," an unofficial, covert operative of the corrupt Southern Nevada Water Authority, which is a vest interest in resort development. When Catherine Case's group of black Escalades crunches over broken glass and Sheetrock fragments, leaving chalky trails. The line explains:

More Escalades rolled in behind, packing the alley.

SNWA security teams climbed from the vehicles and spread out; ducking into dusty abandoned houses, scouting angles. Mercenaries – SwissExec people with M—16s and bulletproof vests and mirrored military glass. (48)

His job is to run black ops for the SNWA, up to and including the bombing of water-treatment plants that won't play ball with his boss. On the other side of the equation, Lucy Monroe is an East Coast journalist known for her work in "collapse porn" that is, the voyeuristic documentation of the decay of the Southwest, roughly akin to the real-world phenomenon of ruin porn in Detroit in recent years.

The problematical relationship between nature-human relations needs further scrutiny, which is done by using next theoretical insight. For environmental apocalypticism to be of substance as an interdisciplinary field, it needs to realize that “ecology is not a slush fund of fact, value, and metaphor, but a less than fully coherent area with a very checkered past and a fairly uncertain future” (Dana Philip 54). Many theorists of eco-concern would be dismayed to learn that despite ecology’s heroic popular image, it has been characterized as a relatively lightweight science by informed observers “whose criticisms of it cannot be dismissed as mere carping even if those criticisms have sometimes been too harsh, above all when other biologists less taken with fieldwork than ecologists are” (Dana Philips 67). In point of fact, ecology has not enjoyed as great a record of success as the other life sciences have. Nor has it always been entirely in line with the ethos prevailing in those other sciences. The divergence of ecology from what is widely regarded as the scientific norm becomes especially clear when it is compared to other significant disciplines.

Deep ecology goes beyond a limited piecemeal shallow approach to environmental problems and attempts to articulate a comprehensive religious and

philosophical worldview. The foundations of deep ecology are the basic intuitions and experiencing of ourselves and Nature. The central problem of the dominant worldview was the human desire to dominate nature. Ecological consciousness and deep ecology are in sharp contrast with the dominant worldview of technocratic-industrial societies. In this regard, it is relevant to quote Devall and Sessions:

This dominant worldview regards humans as isolated and fundamentally separate from the rest of Nature. But the view of humans as separate and superior to the rest of Nature is only part of larger cultural patterns. Western culture has become increasingly obsessed with the idea of dominance: with dominance of humans over nonhuman Nature, masculine over the feminine, wealthy and powerful over the poor, with the dominance of West over non-Western cultures. Deep ecological consciousness allows us to see through these erroneous and dangerous illusions. (72)

To cultivate this non-dominating ecological consciousness, Devall and Sessions adopted two ultimate norms: self-realization and bio-centric equality. This practice ties into a new ethic of being or doing rather than a credo of experiencing or having. Self-realization is regarded as spiritual growth. But the deep ecology sense of self requires a further maturity and growth, an identification which goes beyond humanity to include the nonhuman world. Second, the norm of biocentrism holds that all things have an equal right to live and blossom and to reach their own individual forms of unfolding and self-realization within the larger self-realization. This principle does not preclude mutual predation. Instead, it stresses the larger concern of living with minimal rather than maximal impact on other species and the earth in general.

The notion regarding environmental apocalypticism is the decisive component of the methodological basis of this research. The concept of ecological dystopia is

useful to describing the situation of a woman who is forced to dwell in a critical situation. Ecological concern is perceived by Howarth as shock to the connection between man and nature. The researcher states the view of environmentalists. Environmentalists talk about nature and its preservation. Environmentalists concentrate on their study about consuming nature and natural resources. Talking about environmentalist and their principle of study, William Howarth writes:

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Thus it is fair to say that human beings' unethical and over-ambition is goaded them to invent water knife. The desire to invent water knife comes out of the selfish motive of mankind. While inventing water knife, the researcher as well as scientist grossly violated the principle of the use of science for the sole elevation of mankind. The intrusion of selfish and narrow-minded vision is traceable to the tensions and havoc wreaked by water knife. The multiplication of water knife results in the emanation of environmental dystopia. Human beings' own sporadic, haphazard and reckless activities have inflicted violence on ecological integrity. The disruption of ecological integrity and harmony has resulted in the mounting level of catastrophe and disasters. It is these disasters that have harmed the secure existence of mankind.

The primary purpose of this study is to exhibit how the selfish and unethical

use of scientific research can invite dooms and devastation in human beings' lives. Science and technology has the purpose of contributing to the betterment of human life. But it should not be abused. *The Water Knife* tends to humanize science. The sole concern of science is to upgrade human life. It aims at putting an end to all the hardships and maladies of human lives. But if scientific research and technological innovation are taken heedless of regard for ethics and humanity, human beings will surely have to suffer. In this novel, it shows how experiment with water rights puts humanity on the verge of doom and devastation. By using the perspective of ecological apocalypticism and environmental concern, the researcher explores the issue as to the pros and cons of an unbounded and uninterrupted scientific quest and innovation. The protagonists Angel and Lucy are a biologist widely known for their incomparable mastery. They have made their living working with Water knife. Water knife is of aggressive and seemingly intelligent behavior.

This novel takes place in a near-future United States, where the southwestern states compete with each other for access to a reliable water supply during a period of extended and disastrous drought. In the novel, Angel Velasquez is the "water knife" of the novel's title. He worked as an undercover agent for the state of Nevada, infiltrating and sabotaging the water supplies of rival states. At the start of the novel, Angel had been sent to Phoenix, Arizona, by his boss Catherine Case to investigate some mysterious incidents in the city. Lucy Monroe, a journalist, was living in Phoenix. After discovering that her friend Jamie had been murdered after he became involved in a shady scheme to sell water rights, she feared that Jamie's killers would come after her next. Maria, a teenage refugee from the evacuated state of Texas, was living in Phoenix with her best friend Sarah. After a business scheme to sell water at a construction site went wrong, Maria and Sarah found themselves in debt to a local

gangster known as The Vet. When Angel arrived in Phoenix he met up with his colleague Julio who explained that one of his contacts in the Phoenix Water Board had been brutally murdered. The two men went to the morgue where they met journalist Lucy Monroe who was investigating the death of someone who had been tortured in a similar way to Julio's colleague. Angel felt a powerful connection with Lucy which motivated him to let her leave even though she might have had information that he needed.

Lucy discovers that her friend Jamie had been doing business with a man named Michael Ratan, who lived in a luxurious apartment building called the Taiyang Arcology in Phoenix. Meanwhile, Maria and Sarah decided to have sex with Ratan so that he would pay them enough money to cover their rent and escape the wrath of The Vet. The morning after the girls slept with Ratan, two men broke into Ratan's apartment, murdering Ratan and Sarah while Maria hid under the bed. Lucy came to the apartment while the men were still there and they kidnapped her. Angel arrived and interrogated Maria about what had happened to Lucy. Angel let Maria keep a book that she had found in Ratan's apartment.

Following clues given to him by Maria, Angel realized that his colleague Julio was double-crossing him and had kidnapped Lucy. Angel tracked him down and saved Lucy from being tortured. Angel and Lucy shared what they knew about the water rights Jamie and Michael Ratan had been trying to sell. Lucy and Angel hid together in a Phoenix slum, during which time a sexual/romantic relationship began between the pair. Lucy continued trying to investigate the mysterious water rights but was intercepted by agents from California who threatened to kill Lucy's sister Anna and her children if Lucy didn't agree to betray Angel and turn him over to California. Lucy led Angel into an ambush at a gas station, but he escaped. A group of

disgruntled and mistreated Texan refugees became involved in the fight, having mistaken Lucy and Angel for fellow Texans, leading to a fire which quickly spread across the whole of Phoenix. Using the Texans and the fire as cover from the Californians, Lucy tracked down the wounded Angel and saved his life.

Angel realized that his boss Catherine Case had ordered his murder because she mistakenly believed he had stolen the water rights. Case agreed that she would let Angel live if he found the rights and brought them to Nevada. Angel realized that the rights were tucked inside the book that Maria had taken from Ratan's apartment. Angel and Lucy found Maria in Carver City, where she was trying to cross the state border. Maria needed to escape Arizona because The Vet was going to kill her after she failed to pay him the money she owed. Angel told Maria that if she gave him the water rights he would take her to live in Las Vegas, where she would be safe. When Lucy read the water rights she realized that they could save Phoenix from being destroyed, so she decided to take the documents back to Arizona despite the suffering this would cause for Angel. Unwilling to lose her one chance to escape Arizona, Maria shot Lucy, allowing Angel to regain possession of the water rights. Maria sat on the riverbank listening to helicopters approaching which would take all three of them to Nevada.

Thus, it can be concluded that haphazard programs to achieve innovative breakthrough in science and technology does not guarantee the fact that innovative research brings forth beneficial consequences. Nature has certain code and principle. If human beings go to the extreme and breach these sacred principles of nature, they would have to face a vicious tragedy. The reckless and sporadic search for innovation leads to the disintegration of human civilization. Hence, human beings must be sagacious enough to act in conformity with the sacred integrity of nature.

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