Chapter One

The Nuclear Shadow: An Introduction
The study seeks to analyze the nuclear question as presented in Philip K. Dick’s fiction. Dick creates technological societies in which conflict plays a predominant role. Dick’s works mirror modern-day technological societies in which the economic production is primarily carried out through the use of science and technology. Science Fiction’s and Dick’s primary concern about these societies is how they are regularly in a state of conflict. Carl Freedman was one of Dick’s first critics who attempted to develop a comprehensive critique of Dick’s works. In Freedman’s article in Science Fiction Studies, he argues that the defining characteristics of Dick’s works belong to a period in which the social and economic factors are largely affected by the prevailing capitalistic system of his milieu. In the editorial introduction of Science Fiction Studies’ Special edition on Dick, Freedman elaborates that

I have ... argued that the defining characteristics of Dick’s fictional worlds are commodities and conspiracies; for Dick, virtually everything in the socio-economic field is grotesquely (if sometimes humourously) commodified, while almost everything in the socio-political field is (most often terrifyingly) conspiratorial. Although, as I maintained, this emphasis clearly marks Dick as a pragmatic writer of ... monopoly capitalism in the US, it may also imply a rather more precise historicization... specifically that Dick is a writer of 1960s...If we accept that the ‘60s, as a distinctive socio-cultural period beginning with the Greensboro sit-ins and the election of President Kennedy in 1960...his assassination in 1963, and that the decade ends with the American defeat in Vietnam in 1973 and the unravelling of the Watergate scandal between 1972 and 1974, the the majority of Dick’s works falls squarely within the period (121-130).
Freedman attempts to establish that Dick’s works have “historicalness” by borrowing a term from Dick’s work; The Man in the High Castle (1962) “historicizing” them in the period between 1960 and 1980 in the US, which essentially functioned as an industrial economy, in which conflict is an integral part as suggested by George Slusser (187-213). The study tries to examine how, through the interplay of characters and situations, Dick shows the condition of the human mind that is perpetually kept in a permanent state of ‘war’ and the way these characters lose their sense of identity and reality due to the rapid and incessant onslaught of machines. A classic instance of this is Dick’s short story, ‘The Gun’ that presents the human propensity and ingenuity for destruction. It deals with a planet laid waste by nuclear war except for an archive, which is guarded by a gun. A few visitors to the planet disable the gun and, on examining the archive contents, realize that the residents had handed over their treasures to the safety of machines that ultimately became the dominant life form on the planet. On the visitors’ departure, the machines start reassembling the gun once again, which shows the extent of their domination. To borrow Roger Lockhurst’s words, “Dick has produced a body of work within Science Fiction, intensely concerned with the interpenetration of phantasmal and the real, the human or the machine, under conditions of perpetual war” Science Fiction (106). Dick’s works show how war economies use technological advancement to distort reality and keep humans in a state of belief in permanent and inevitable war. In other words, it prevents humans from developing thoughts that could create alternative worlds based on human values. Lawrence Sutin too, notes Dick’s focus on life in the shadow of the Bomb. He cites Dick’s essay, “Pessimism in Science Fiction” where Dick sees himself living in a world covered by “a worldwide loss of faith in science and progress” where “to avoid the topic of war and cultural retrogression is…unrealistic and downright impossible”. All this goes to show that propensity for violence and war, form an intricate part of
technological societies, and by extension, of nuclear wars, which is its ultimate form. The aforementioned factors are some of the major concerns of Dick's works.

A comprehensive analysis of Dick's fictional representation of his society throws up a major concern in Dick's milieu, the threat of nuclear weapons. To get a good understanding of the issue of nuclear threat, its impact on the human mind and why it became an important issue in Dick’s fiction, one needs to be aware of the debates on this issue in the fields of history, psychology, and literature. This alone will provide the student of this phenomenon with what Isaiah Berlin calls an “imaginative insight” to bear on the “possible world” of the future. One of the critics who recognised this aspect of Dick’s works was Daniel Fondaneche who suggested that Dick’s portrayal of American society criticized its fundamental values like respect for religion and socio-political institutions.⁶

The old world died with the bombings of Hiroshima and Nagasaki. Human beings realized that it had created a means of total destruction. It could no longer think of the long run, or in terms of the distant future and generations to come. Humankind had to accept living in an uncertain and unstable present. If those born in the Swing era like Dick, belonged to the old world, the new generation had to live with the risk of nuclear disaster. This became an integral part of its mode of thought, of its style of life. (141)

Though Fondaneche did raise the issue of nuclear threat, his primary concern was with the perception of Dick’s works in France with respect to renaissance of Science Fiction in France in 1970s.

Another reason for conducting this interdisciplinary knowledge is that it can bring different stakeholders in the nuclear issue to the discussion table. The study hopes to analyze
what is at stake in a world that is threatened by nuclear weapons and what it means to be living in the nuclear shadow. It is hoped that this understanding would lead to one's identification with the rest of humankind which Lewis Mumford calls the "species self" and adds that,

\[
\text{Man's principle task today is to create a new self, adequate to command the forces that now operate so aimlessly and yet so compulsively. This self will necessarily take as its province the entire world, known and knowable, and will seek, not to impose a mechanical uniformity, but to bring about an organic unity, based upon the fullest utilization of the varied resources that both nature and history have revealed to modern man...a new vision of a self capable of understanding and cooperating with the whole (138).} \tag{7}
\]

In many ways, Mumford suggests that the realization that nuclear threat is not limited to any race or country but to the entire human race, would make even enemies reconsider working together for their common survival by identifying themselves with the rest of humanity. This idea finds resonance in Dick's fiction.

A student of the nuclear issue is often inclined to turn to scholars and literary critics who have examined this issue from different perspectives. The search for fellow travellers often begins in the domain of literary criticism. It is but natural to hope that literary critics are more likely to provide a student of Philip K. Dick the vantage point from which she/he can understand the writer's treatment of this issue. Albert I. Berger examined the role of nuclear weapons in Science Fiction, focussed on how nuclear weapons were initially visualised as the ultimate source of power, and eventually were perceived as being inevitably linked to human annihilation. He reasoned that while retaining its sexual overtones, nuclear weapons helped to raise social and moral issues. \tag{8} Paul Brians, who catalogued the genre of nuclear war in Science Fiction in his
book, *Nuclear Holocausts: The Fiction of Atomic War, 1945-1984* elaborated on the form of unbirdled technology like nuclear weapons and the havoc wreaked by it. 9 H. Bruce Franklin in his editorial introduction to *Science Fiction Studies*’ special issue on Nuclear War and Science Fiction, points out to the fact that Science Fiction has not been responsible for “the sources, dangers, dimensions of our nuclear nemesis. But it was Science Fiction that helped form the imagination that got us into this mess”. 10 Martha Bartter looks at nuclear war in Science Fiction as an effort on humankind’s part to perceive if there are any positive aspects to nuclear annihilation, provided the human race manages to survive. Bartter ascribes this tendency to an inherent human desire for rebuilding cities which have failed to realise human ideals. She argues that in spite of knowing about the nuclear threat, it might actually be perceived as ‘not-so-bad’ and might even be seen as ‘good’ as Science Fiction on nuclear war may prompt the development of better “vision of peace”. 11 Her work has many parallels with David Dowling who looks nuclear war in Science Fiction in *Fictions of Nuclear Disaster* (1987) as a visionary response which attempted to look at it through the an apocalyptic and theological framework. Dowling believes that his work carries out one of the functions of Science Fiction, as mentioned by Kingsley Amis (1961 134). Dowling points out that an enquiry into human propensity for violence necessitates studies into the area of nuclear threat otherwise it may lead to another failure to understand our present reality as pointed out by Paul Brians. 12 Dowling argues that without Science Fiction and nuclear apocalypse fiction, it would be impossible to have a “valid humanism, too [and for that] sophisticated disaster fictions must continue to be written and read.” He maintains that the writing and the subsequent reading of nuclear apocalyptic fiction would lead to the development of an “attitude of calm enquiry”. 13 Dowling maintains that
If nothing had prompted our forefathers, the Hitler’s Holocaust at least has compelled us in the latter twentieth century to consider the nature of man in extremis. The nuclear threat now provides the most effective scenario for doing this. He cites the work of R.J. Lifton who has “evolved a philosophy out of his work with Japanese nuclear survivors.” (217). 14

Dowling agrees with Lifton’s idea that an encounter with death and the subsequent return to life endows one with new perspectives and insights into the threat posed by nuclear shadow, similar to the effect of reading fictions of nuclear disaster.

What I am suggesting is that ‘touch death’ and rejoin the living can be a source of insight and power. This is true not only for those exposed to holocaust, or to the death of a parent or lover or friend, but also for those who have permitted themselves to experience fully the ‘end of an era’, personal or historical. (Lifton 115).

And to this argument, Lifton adds that

We need Hiroshima and Auschwitz, as we need Vietnam and our everyday lives, in all of their horrors, to deepen and free that imagination for the leaps it must make...The vision of total annihilation makes it possible to imagine living under and beyond that curse.( 281).

Lifton defends the purpose behind his focus on the nuclear threat and argues that its necessary to study the apocalypse in order to find ways to prevent it. Dowling’s study, in spite of its agreement with Lifton about the function of studying nuclear fiction, is limited in its scope as it primarily focusses on surveying works on nuclear disaster. Though Dowling does refer to Dick’s contribution to the genre as being able to portray “the vastness of the destruction and the
personal sense of the stunned horror of the observer" (50), it is limited to the analysis of Dick’s Dr. Blood money alone as a fictional representation of a post-apocalyptic world. Another limitation of Dowling’s work, notwithstanding his drawing parallels with Lifton’s work, is his suggestion that,

Lifton is in danger of slipping into the sentiment of 'chic bleak' and making doom-consciousness pragmatic, whereas the most common effect of such an experience, I have found, is to induce a feeling of profound humility and quietism before the vast forces of Nature, history and the mob. Nevertheless his general attempt not only to confront the nuclear facts but to turn them to account is similar to my own attempt in studying fictions...Lifton puts his case and mine more compelling in terms of preparing ourselves for the burdens of mature living... (217).

The study does not seek to highlight the limitations of the literary criticism on nuclear war in Science Fiction but hopes to add to it a newer perspective that would open up the genre for wider audience. It is with this intention that the study turns to the psychological and psychoanalytical analysis of the impact of nuclear threat on the human psyche. The study takes up the present work on the treatment of the nuclear debate in literature by starting from the body of work like that of David Dowling and others. In this respect, one work that showed great promise in its focus on the impact of nuclear war’s threat on the human mind and its functioning in the nuclear shadow was that of Robert Jay Lifton. Lifton, a practising psychoanalyst, examines the threat nuclear weapons pose to human future and also about the human mind that created and presently suffers from the threat of nuclear weapons. Lifton attempts to find if there’s an alternative or new direction that can offer redemption to humankind by offering
avenues to escape from the nuclear abyss. Lifton’s observations on the impact of the nuclear threat on the human psyche will, it is assumed, provide an interesting parallel to Dick’s imaginative portrayal of this less-explored area of human life. Like Dick, Lifton tries to analyze the problem by studying the symptoms in order to arrive at a lucid understanding of the nuclear threat from diverse angles, and highlights the extent of the nuclear threat that affects human civilization like no other threat in its history. His extensive work with nuclear war victims and Nazi doctors, along with his standing as a medical practitioner justify the assumption that reading Dick’s fictional representation of the phenomenon intertextually with Lifton’s work with the different stakeholders in the nuclear war will help one assess Dick’s treatment of the experience of living under the nuclear shadow.

Though the first nuclear explosion took place in 1945, there has been a great reluctance to address the nuclear issue. Lifton posits that there has been a ‘universal numbing’ that has led to a reluctance to critically examine this threat in spite of universal concern over it. Lifton works with the assumption that human civilization has been caught helplessly in the nuclear entrapment. He employs an interesting strategy to bring the nuclear issue within the horizon of the historical experience of contemporary societies. He focusses on the modern genocide, specifically the Nazi genocide as it is closely connected with the nuclear threat that came about at the end of the Second World War. He attempts to draw parallels between the Nazi genocide and the nuclear threat in order to study the human psyche, while treating the nuclear threat as a concrete totality, that has the potential to perpetuate unknown destruction on the human race. Needless to say, this comparison is not all that obvious. The Nazi holocaust is a fact while nuclear holocaust is a possibility, however distinct it might be. While the Nazis primarily focussed on Jews, Gypsies or Russians, whom they perceived as a threat to them, nuclear weapons, which are supposedly
made to prevent war and maintain peace potentially target the whole of humanity. Nuclear weapons are a deterrent, made to avoid wars that can result in mass murder as they carry the potential to destroy all life forms, the past, present, and even the future, unlike conventional instruments of destruction that had limited destructive capability. While the Jews were the largest victims of Nazi genocide, every human being is an active or passive victim of nuclear holocaust. Unlike the Nazi genocide, where there was an outside world which could send in aid when the attack had ceased, the world under nuclear wars would have no outside world to send aid, as by then the world as a whole would have ceased to exist. Lifton’s strategy to understand a complex phenomenon that borders on the sublime through a comparison with an event of a similar kind, though of a lesser magnitude, helps one understand the destructive streak in human behaviour that has led the human race into the path down the nuclear abyss.

Another reason for the choice of Lifton’s work as the point of reference for this study is the manner in which he looks at the issue from the point of view of major stakeholders starting from leaders, statesmen, atomic scientists, technicians, defence personnel, war planners and strategists, general population, activists, philosophers, and writers. Lifton is not alone in assuming that almost everyone in a modern society is a stakeholder in the nuclear issue. Historians like Charles S. Maier (Lifton and Markusen 14) have noted that during the Holocaust, ordinary individuals showed that they are capable of mass killing and for that reason “the psychologist and moralist as well as the historian must deal with the issue of how men and women can be apparently normal and yet be killers.” By drawing stakeholders from crosssection of society, Lifton highlights the extent of the threat facing humankind - that nuclear threat not only affects any race or country but the entire human species. He traces the origin of
the threat back to human nature and its affinity towards violence and the development of the mindset to carry out mass murder or genocide while leading normal lives.

In Lifton’s view, the development of this genocidal mentality is closely associated with technological societies where the onus is on technological innovation to provide solutions to problems. Technological solutions, though strategically effective and economical may be found to be wanting in moral consideration. Technology has the power to enable individuals to harm others without experiencing guilt and this takes place due to its ability to distance individuals from their violent actions. A good example is the condition of the technician pressing the button for launching nuclear missiles or the pilot in an airplane dropping bombs on civilian population in cities like Dresden as mentioned in Kurt Vonnegut’s novel, *Slaughterhouse Five*. The role played by different stakeholders in precipitating violence and its ultimate form, the nuclear genocide, is important in understanding the threat’s nature and extent. During the Second World War, major powers carried out attacks under its leaders like the American president Harry S. Truman and British prime minister, Winston Churchill. Nuclear weapons were perceived as solutions that could settle international disputes and establish supremacy over the rival powers. Both Axis and Allied parties were involved in a race to make nuclear weapons first. However, even though the Axis powers were on the verge of surrender, the Allied powers who made the weapons first, used it. The statesmen who served on the committee that deliberated and decided on the making and using nuclear weapons failed to even consider the the possibility of restraint or abstinence in using nuclear weapons (Lifton and Markusen 19-21). Atomic scientists looked at nuclear weapons as challenges that required their specialised knowledge and that by developing nuclear weapons they were doing a patriotic service to their country. Technicians and defence personnel like pilots were able to carry out actions that instantly killed thousands, by
believing that they were merely doing their 'duty' and were helped by technology's ability to keep them 'isolated' and numbed from feeling the horrors of mass killing. Kurt Vonnegut who witnessed the Dresden bombing, which was limited to the use of conventional weapons, points out that, "Dresden was like the moon...nothing but minerals. The stones were hot. Everything in the neighbourhood was dead." (Lifton and Markusen 21). Historians like Michael Sherry suggest that history of the twentieth century can be studied as development of technological advancements like airplanes, nuclear weapons and their adoption for warfare (Sherry 1986). Before the first use of atomic weapons, there was a certain ignorance about its capability for genocide. But with the beginning of the Cold War era, the development of the hydrogen or fusion bomb took place and there was ample knowledge about the weapon's ability to inflict unlimited destruction. With it, the systematic killing of masses or what Lifton calls a 'genocidal mentality', took place. According to Lifton and Markusen, the mentality kept evolving and nurturing the development and manufacture of more powerful nuclear weapons by pointing out the vulnerability of a country like America to nuclear attacks from other nuclear powers like Russia. Thus citing vulnerability nuclear weapons continued to proliferate till they became a pervasive threat. Lifton and Markusen say that,

...an aggressive pursuit of the illusion of security via ever-improved and expanding nuclear stockpiles together with a manifest awareness of the weapons' genocidal qualities [came into existence]. With that combination the genocidal mentality itself, while largely unacknowledged, moved closer to the surface."

(31).

Lifton becomes important for the particular study by virtue of his work on a wide range of topics, from the survivors of the bombing of Hiroshima, the Chinese Cultural Revolution, Vietnam
veterans, and nuclear weapons. In many ways he attempts to function as a cartographer of the human psyche under the threat of violence in its myriad forms. In his preface to *The Genocidal Mentality: Nazi Holocaust and Nuclear Threat* (1990), Lifton points out that

I[he] had been much concerned with psychological and moral dimensions of nuclear threat. By the time I published *The Nazi Doctors: Medical Killing and the Psychology of Genocide* [*The Nazi Doctors* from now on] in 1986, I was convinced that certain forms of behaviour in German society during the Nazi period had relevance for American and Soviet behaviour in connection with nuclear weapons. To bear witness as a scholar to these Nazi actions required looking back to confront them and looking ahead to apply what I could learn from them. (Preface IX)

In *The Nazi Doctors* Lifton portrays the transformation of healers into killers, how doctors instead of saving lives, were able to take lives while at the same time highlighting that these professionals were all ordinary human beings who were capable of carrying out inhuman acts of cruelty and violence against other human beings. Lifton’s work with Nazi doctors led him to look at the issue of nuclear threat in greater detail and to conduct a focussed study on how the human race has developed an affinity for genocidal tendency. In the preface to *The Genocidal Mentality* Lifton’s work on Nazi doctors prompted him to examine the mental condition of human beings in the face of extreme threat like the nuclear war. His work becomes important to the present study which seeks to analyze the changes in the human psyche under the threat of the nuclear shadow by drawing parallels between his works and that of Dick. Lifton, in the course of his work with Japanese youth, came across various forms of mental adaptations that took place in their psyche as a result of the changes in history. He found that many of his subjects, who were
directly or indirectly victims of the Second World War, had experienced a form of breaking of their psyche and this in turn had led to various forms of mental adaptations. The defragmentation of the human psyche led to the subjects' inability to function normally as individuals at intra-personal and inter-personal level. He also observed that while most victims and perpetrators of what he called "atrocity-producing situations", remained trapped in feelings of unreality and guilt, a few were able to develop a temporary emotional resilience.

Lifton initially found that his subjects had experienced a sense of, what he called, "historical dislocation". The study of the Japanese is insightful as it made possible to delve deep into the psyche of people who had been both perpetuators and victims of violence which is similar to Dick's focus in his works that form the core of the present study. Lifton's work with Holocaust victims and later with the Nazi doctors led him to believe that under conditions of extreme threat the human psyche becomes unable to handle it beyond a point. Faced with such conditions the psyche then develops certain defensive mechanisms that would help it to overcome the threat temporarily but the mechanism may become detrimental to mental well-being if the threat continues over a prolonged period. He also observed that the cause of the subjects' mental breakup could be traced back to the demanding conditions and fears in modern social life at the individual as well as the social level. One of his most important observations was that ordinary individuals were easily capable of committing crimes against humanity without having any form of mental illness or psychosis in what he called, "atrocity-producing situations". The same observation forms the concern of Dick's works which suggest that evil can be perpetuated by any individual in modern society which invariably creates "atrocity-producing situations" in its quest of power.
The findings formed the basis of his subsequent works like Nazi Doctors and Genocidal Mentality, as mentioned in his article Individual Patterns in Historical Change. In his studies, Lifton applied the principles of psychohistory which were originally propounded by Sigmund Freud and later developed by Erik Ericson to study the lives of famous personalities. Lifton’s studies, on the other hand, were insightful into understanding the relation between human beings and violence. Lifton with his co-author Eric Markusen, founded the Wellfleet Psychohistory Group with Erik Ericson, and it tired to study the causes for violence, genocide and war.

Lifton’s work in psychohistory had its share of criticism. Kristen Fermaglich in her work American Dreams and Nazi Nightmares (2006) analyzes Lifton’s evolution as a secular thinker who tried to use his own Jewish experience of the Holocaust and apply the same to the American milieu. Her work also takes note of the criticism of Lifton’s work on the grounds of trivialising the Holocaust. Fermaglich tries to trace how Lifton used his study of the Nazi concentration camps to draw a parallel between it and different aspects of the American experience, an aspect which is of great importance to the present study. She analyzes how Lifton applies his concept of “the survivor”—developed from his work on victims and victimizers in Auschwitz and Hiroshima to study the American experience of the Vietnam War. She argues that Lifton was largely responsible for forming the “early Holocaust consciousness” and how his own Jewishness and experiences with Holocaust participants affected his thought. In her work Fermaglich points out how Bruno Bettelheim’s work influenced her and through her it also influenced her subjects and their thinking. Bettelheim’s works, based on his own experiences as a prisoner at a Nazi camp, traced the evolution of Nazi concentration camps as a symbol and tool of social oppression into that of an instrument of genocide. Lifton’s own works focus on the development of a genocidal mentality that arose as a result of the political and social oppression
that existed in a society, the same which is raised by Dick in his apocalyptic works. Daniel Jonah Goldhagen in his review of Lifton's *The Nazi Doctors* (1986), supports Lifton's premise that genocide needs the active involvement of ordinary people (despite their belonging to developed societies like the Germans and Jews) and getting them to be active victimizers and victims in the genocide; racial or nuclear.²³ Goldhagen goes into the details of the role played by Nazis in moulding public opinion into accepting the organized attacks on Jews as necessary for the greater good of Germany.²⁴ In his work, *Thought Reform and the Psychology of Totalism*, Lifton introduced the concept of Totalism, according to which ideological movements and its allied organizations (which may also attain control over the State like the Nazi ideology) that attempt to gain total control over human life and thought in order to achieve its goals. He identifies certain common traits among such movements, namely denial and fear of death, desire for power and control even at the cost of harm to others. It involves making individuals and their societies; partners in carrying out violence against select groups of individuals, deemed as a metaphorical threat to the ideology and its followers, and lastly suggesting a panacea for all ills-- the complete destruction or genocide of the 'enemy'. Lifton provides the example of the Germans and Japanese, while comparing them with the Americans, suggesting that the genocidal mentality is very much one of the gravest threats facing humanity in the modern world. *The Psychology of Nuclear Conflict* tries to establish that the presence of nuclear weapons constitutes a crime against humanity and that any action in that direction is necessarily, evil.²⁵ John Darley makes an in-depth analysis of the role played by social organizations in creating, developing and promoting genocidal tendencies.²⁶

Most evildoers are produced by a process of socialization into doing evil, a process that makes them capable of doing evil autonomously and independently
in the future and that the organizations that socialize an individual into doing harm are created and sustained ... when a society or powerful groups within that society are subjected to difficult life conditions. The possible sources of these difficult life conditions are numerous and various; they can include economic hardship, political conflict between groups within a society (with the associated feelings of loss of control), perceived threats from criminal violence (Darley 221). Darley’s analysis leads us to look at the larger issues related to how societies condition humans into developing feelings of animosity towards the other and how this has resulted in, what Eric Hobsbawn calls the twentieth century being called the age of “megadeaths” of more than 180 million people in spite of the developments in different aspects of human societies. Mark Levene looks at the types of genocide committed by different countries and argues that the struggle for control of power by individuals, societies, and nation states lead to unleashing violence on human race for advantages (which may be monetary, political or tactical) and legitimising them. Levene classifies them as,

Type One warfare is between recognized and usually powerful sovereign states within the system. In the twentieth century the “totalization” of these interstate struggles, particularly in the way that, for instance during the Second World War, adversaries have indiscriminately targeted and murdered millions of the non-combatants of the opposing side, has led some writers not only to describe this type of warfare as “genocidal” but to discern similar psychological, technological, and political processes at work as those which form genocide... The bombing of Dresden and Hiroshima, or for that matter the creation and active mobilization of
nuclear arsenals capable of producing global annihilation, are arguably, no less “crimes against humanity” than Auschwitz or Treblinka. (Levene, 305-336). 28 Levene traces the evolution of genocides and suggests that genocides are an active part of expansion of influence of capitalistic economies, whether, they are developing or developed industrial nations by citing the examples of countries like Germany and Rwanda. 29 Levene says that studies on genocide remind us that,

...genocide, whether perpetrated by a technologically advanced society like Germany or a relatively undeveloped one like Rwanda, still requires the active mobilization of hundreds of thousands of their “ordinary” citizens to pull triggers or wield machetes; that this involves not a spatial removal but a direct confrontation between perpetrators and victims... (307)

He warns that one of the main causes of the development of genocidal tendencies is the craze for power and the attempt to acquire it through the setting up and expansion of technological-capitalistic economies as has been the case with industrial powers and aspiring ones. 30 Dick’s writing indexes the contemporary economical and social changes taking place in his world and posits the future outcome as the threat of nuclear catastrophe which can destroy the past, present, and the future. Dick’s focus on the threat of nuclear shadow puts him in the company of other writers like James G. Ballard, Martin Amis and others who follow the secular apocalyptic tradition. The study hopes to examine the psyche under the nuclear shadow by drawing parallels between the works of Lifton and Dick. Dick’s works are about people who get caught in a ‘reality’ that keeps shifting, making them its prisoners. Similarly, Lifton’s basic premise is that individuals under threat experience fragmentation of the mind which prevents them from establishing meaningful relations with the world outside them and even makes it possible for
them to commit atrocities on others without experiencing feelings of guilt. By studying Nazi
doctors, Jewish victims, and Japanese youth, Lifton attempts to identify the processes that enable
ordinary educated professionals to develop a genocidal mentality to commit crime against
humanity with minimal damage to the psyche.

Lifton makes use of psychohistory to analyze the social and economical conditions that
led to development of the genocidal mentality that in turn led to the creation of nuclear weapons.
In his work he was largely influenced by his mentor Erik Erikson, who applied the principles of
psychoanalysis to study major personalities in history like Adolf Hitler and Sigmund Freud who
was concerned about popular attitude towards death and violence. Lifton’s studies were the basis
of his founding the Wellfleet Psychohistory Group which sought to look at human propensity for
violence, war and genocide in history.

The development of the genocidal mentality is largely assisted by the economical,
political and social developments of the period. Let us look at some of the factors that provide
the environment for the evolution of the genocidal mentality that paved way for the making of
nuclear weapons. In Genocidal Mentality, Lifton and Markusen attempt to set their argument in
the tradition of critique on Nazi ideology and the resultant genocide by drawing on the works of
Isaiah Berlin and Paul Boyer. According to Isaiah Berlin, genocidal tendencies, whether Nazi or
Nuclear occur within a specific context due to presence of a stimulus or pain and how a cure for
it is found. He “sees nationalism as emerging from a wound to group consciousness and as
including a new vision of life which helps to heal that wound. Lifton and Markusen cite Isaiah
Berlin to suggest that the Nazis have taught us that a nation’s potential for genocide greatly
depends on how it defines its collective trauma and upon the kind of ideological response
brought forth as relief and cure”. (Lifton and Markusen 51) Germany from 1919 onwards
suffered from several factors like serious inflation, economic failures, and lastly a humiliating defeat in the First World War. The terms of Treaty of Versailles and the demilitarization of German Rhine valley (a part of Germany which took great pride as a military race) were matters of national shame which were heightened by the fact that it entered the First World War with an intention of overcoming its internal struggles with the acceptance of unification and modernity, and finding its identity as a nation. The injured national pride led to development of a feeling of a disease which had to be cured. The cure came in the form of the ideology put forward by the Nazi party under Adolf Hitler. The Nazi ideology claimed to have diagnosed the problem afflicting the nation to be one that had been caused by external causes but mostly from internal causes which needed a cure. The proposed cure was a scientific or specifically speaking, a biological and racial cure. Nazis were able to alter the perception of reality of their plan to kill a race by claiming it to be a scientific solution to a national malady. The solution was said to be an absolute answer to all problems and it negated all other alternatives. In his book *Thought Reform and the Psychology of Totalism* Lifton discusses the role of thought reform in moulding human thought. By applying the same principle, he suggests that thus, the Nazi biomedical vision was absolutist, totalistic, and reductionist. It operated in terms of a dichotomy of good and bad that made it easy to alter the perception of reality, sometimes in limited aspects.

...that and biological millenarian polarization contributed directly to the ultimate feature of totalism—the *dispensing of existence*. When good and evil are absolute and clear, and particularly when they can be readily identified in biological terms, it is a relatively easy step to decide that biological evil should perish and only biological good should survive. That ideological dichotomy pervaded the institutions and policies of Nazi Germany in ways that went beyond the beliefs of
an individual. Nazi doctors in Auschwitz, for instance, varied greatly in their ideological convictions; but belief in that dichotomy made it psychologically easier for them to take part in the killing. (Lifton and Markusen 56).

And, the influence of this particular type of dichotomous reasoning was found to have great influence on different sections of the German society as evidenced in the following study, “The ideology exerted its power over those who believed only bits and pieces of it. Among Nazi doctors, for instance, even [partial beliefs, or ideological fragments contributed greatly to their participation in the projects of the regime]”. (Lifton and Markusen 56).

Like the Germans, who experienced a national trauma that led to their collective adoption of Nazi ideology as a totalistic and absolute cure, the rest of the world, especially United States of America, also experienced a similar trauma. United States’ experience largely stemmed from the memories of the attack on Pearl Harbour which was marked by unpreparedness and weakness to and external threat. Paul Boyer in By the Bomb’s Early Light suggests that the feeling of nuclear vulnerability in the American mindset (the most advanced industrial society) led to its anxiety about external enemy’s threat.\textsuperscript{32} With the discovery of the atom bomb’s immense power for destruction, came H.G.Wells’ work, The World Set Free (1914). This in turn led to a fear that Germany might beat the world in the attempt to make nuclear weapons. Many American scientists like Leo Szilard feared that if nuclear weapons came into German possession it would be a threat to America and to avert the threat urged the American President to develop American nuclear weapons. The subsequent development and use of nuclear weapons in Hiroshima and Nagasaki, instead of making the American public feel secure, made the sense of vulnerability more acute.
The American response to the Pearl Harbour was one of great trauma as until then Americans had never experienced or anticipated any such situation being geographically distant from any of its enemies. The feeling of vulnerability was heightened by its thitherto pride of superiority on the American continent. Eventually this feeling of vulnerability was transformed into an enmity with Soviet Union, according to Paul Boyer. Lifton draws on the works of critics like Berlin and Boyer who have previously addressed the nuclear issue but from different perspectives.

The fear of Soviet Union was an extension of the fear of the nuclear weapon which started with the work of Frederick Soddy whose writings formed the basis of H. G. Wells’s Science Fiction novel, The World Set Free. Leo Szilard, influenced by Wells’s work, began to think about the atom bomb as becoming a part of reality and was alarmed by the threat it could cause in the hands of Germans. Thus, we can see the fear of the possibility of nuclear weapons being built actually causing their being built. The same fear caused many scientists like Albert Einstein and Enrico Fermi to join Project Manhattan, the American effort to build atom bomb before Germans. However, after the war, it was found that both Germany and its ally Japan were both nowhere near the building of the nuclear weapons.

With the use of atom bomb in Hiroshima and Nagasaki, the American population felt a sudden awakening that there was a new threat that had the power to annihilate the entire human race. The attack created a realization that what had been used in Hiroshima could also be used on any city in the world, even any American city. Pearl harbour attack awakened the American population to its vulnerability and the Hiroshima bombing made the world aware of the fundamental threat of the Nuclear age- that of the human species’ genocide. It led to, what Paul Boyer calls, “Years before the world’s nuclear arsenals made such a holocaust likely or possible,
the prospect of global annihilation filled the national consciousness”. The Hiroshima attack made the American population not only recognise its vulnerability but also made them obsessed and eventually paranoid about “national security”. In addition to the obsession with national security, there was widespread movement, drawing on popular confusion, to find alternatives to ensure the continuity of human species on Earth. However, this consciousness was strengthened with the beginning of antagonism between the two greatest technological societies, United States of America and Soviet Union. The resultant conflict between the two technological societies led to the Cold War. The Cold War led to a shift of focus from nuclear weapons to a ‘new’ enemy, Communist Russia from whom the ‘secret’ of nuclear weapons had to be protected. Thus the fear of nuclear weapons was replaced by the fear of “Communist aggressors” in the popular American psyche.

Germany, when faced with a traumatising defeat turned to Nazi ideology to find a ‘cure’. The Hiroshima bombing created a similar trauma with the threat of species’ genocide by nuclear weapons. The search for an ideological cure for nuclear weapons ironically led to a cure which was nuclear weapons themselves. Lifton defines,

Nuclearism, then, is an exaggerated dependency on nuclear weapons for strength, protection, and safety, whatever the evidence that they themselves are the instruments for genocide. The weapons are passionately embraced as a solution to death anxiety and the threat of extinction and a means of restoring a lost sense of immortality. Nuclearism can take the form of a secular religion, a total ideology in which grace and even salvation—the mastery of death and evil—are achieved through the power of the new technological deity. And that deity is then seen as
capable of not only apocalyptic destruction but also of unlimited creation. (Lifton and Markusen 70-71).

Nuclear ideology took on a new form of the protector instead of that of a universal menace on the basis of a convoluted logic which is explained by Martin Amis in his work, *Einstein’s Monsters* (1987),

What is the only provocation that could bring about the use of nuclear weapons? Nuclear weapons. What is the priority for nuclear weapons? Nuclear weapons. 
What is the only established defense against nuclear weapons? Nuclear weapons. How do we prevent the use of nuclear weapons? By threatening to use nuclear weapons. And we can’t get rid of nuclear weapons, because of nuclear weapons. (5).

Nuclear weapons became the panacea for all problems in technological societies. Robert Oppenheimer, a former nuclear weapons architect, suggested that commitment to nuclear weapons couldn’t be justified as, “…our atomic bomb will not do all things…”. The dependence on nuclear weapons was further strengthened by citing the factor of ‘national security’. Further citing the failure of United Nations Organization in ensuring collective security and to ensure the continuation of American supremacy, ‘national security’ was put forth as the ‘Holy Grail’ that was to be attained at any cost. The quest for the ephemeral ‘national security’ necessitated dependence on nuclear weapons for protection from nuclear weapons themselves, so much so that it became necessary to create an “evil enemy” like Soviet Union in order to justify the ironic dependence.

The dependence on nuclear weapons to protect peace can be traced back to the role played by science and technology in modern technocratic societies. Lewis Mumford in *The
Pentagon of Power: The Myth of the Machine surveys the development of modern technological societies where the onus is on science and by extension on machines instead of humans. This is followed by attempts to remould the world in the image of machines where individuals are reduced to mere cogs in the system as machines alone were considered to be rational and logical. With this logic, the threat of machines to humans becomes invisible and they are able to keep human agents insensitive to the plight of other humans who become victims of the machines.

Another aspect of technological societies, is the tendency of reduction; where everything is reduced to the level of science and a scientific solution is sought to any problem that occurs. Technology enables the formation of the idea that it is rational, accurate, and that by extension, it is predictable and controllable. Technology also gives its practitioners a chance to enjoin their own destinies with that of the machines which are immortal. Thus nuclear weapons become a part of scientists' vision of immortality. Nuclear weapons are able to make people to assume that like machines, nuclear weapons can be controlled and that they exist for the benefit of humankind. These efforts are a part of human expression of psychism, which is described by Lifton as, “the attempt to achieve control over one’s external environment through internal psychological manipulations, through behaviour determined by intrapsychic needs no longer in touch with the actualities of the world one seeks to influence.” Technology and machines are dependent on power and the ultimate form of power is that of nuclear weapons. The destructive potential of nuclear weapons are infinite and by definition, the non-exercising of this power, is the allowing of life to continue. Thus nuclear weapons become identified as deities which are to be worshipped. The same devout feelings for nuclear weapons take the form of heroic scientism where the scientist plays the role of the mythical ‘hero’ who is in pursuit of the Holy Grail,
responding to the call of "technological imperative" that promised human salvation. Nuclear weapons become the Holy word that was invoked as an answer to every question.

Nuclear weapons function as an extension of the genocidal mentality prevalent among technocratic societies, even though the genocidal mentality was a product of nuclear weapons themselves. Genocidal mentality points out the presence of a nuclear threshold which prevents a nuclear catastrophe. It is an imaginary boundary and the avoidance of crossing it prevents nuclear war from happening. The crossing of the threshold is avoided by a demonstration of a willingness to cross it. Nuclearism has the potential of being able to come into being in any technological society that is willing to cross the threshold for reasons like national glory or winning military victories. This process is eased through technological distancing and normalization of the realization that their actions can inflict extreme sufferings on their victims. The agents of nuclearism, the scientists, and technicians get immersed in nuclearist ideology by carrying out nuclear war simulations or scenarios in which their guilt is removed by the knowledge that they are involved in just a game. However, repeated exposure to simulations render the human mind capable and willing to cross the nuclear threshold.

Another aspect of technological societies standing at the nuclear threshold is the decision-making ability about crossing the threshold. Herbert York maintains that the absurdity of nuclearism is the fact that decision to cross the threshold is not made by responsible and mature individuals but by machines.

…not yet so widely recognised [information,] lies in the fact that in the United States the power to decide whether or not doomsday has arrived is in the process of passing from statesmen and politicians to lower-level officers and technicians and, eventually to machines...we seem to be heading for a state of affairs in
which the determination...will be made either by an automatic device designed for the purpose or by a pre-programmed President who, whether he knows it or not, will be carrying out orders written years before by some operations analyst. Such a situation must be called the ultimate absurdity” (Lifton and Markusen 8).

Lifton argues that nuclearism has attained a position of a behemoth where its control has become unquestionable. Nuclear managers find it extremely challenging to control the widespread and extensive systems that form the nuclear behemoth. Their latent inability to control nuclear weapons may make the nuclear managers to attempt to control the ‘enemy’ and the ‘result’ through erroneous misrepresentation of recovery and revivial. “The problem of controlling the nuclear behemoth lies not only in the inevitable errors and miscalculations within any sustained interaction of human beings with technology but in the extraordinarily exaggerated reliance on technological arrangement [Italics mine].” (Lifton and Markusen 187). Lifton and Markusen suggest that the strange fact about nuclear weapons is that ‘nobody’ is in charge or responsible for it.

It is certainly true that nobody has a grasp of the details by a large measure, and that holds true for things like the war plans. Somebody in the White House makes up a plan that says the reason we have nuclear forces is first to deter nuclear war, second to deter aggression in general, third we want to minimize possible damage and so forth. Somebody makes a general statement like that, the somebody in the Pentagon at the Secretary’s level takes four or five pages to say that in the Secretary’s annual report, which then goes to the services and finally it reaches the targeting staff and they plan attack. They tend to do it through computers and there are various factors that give certain weights and you try to optimize this and
then you try to design something so that you can reprogram, and so on. And it
gets to the point where it's probably true that no one really understands ... (189).

The very existence of a nuclear threshold created by the existence and maintenance of
nuclear weapons shows that there are many factors; major psychological or supporting ideologies
that make the crossing of the nuclear threshold very likely. One factor is that even minor
differences could lead to escalation of hostilities and the adoption of immediate bellicose attitude
or belligerent posturing by nuclear weapon states. The extensive preparation for nuclear war and
the maintenance of nuclear weapons may lead to non-use of conventional means of redress like
diplomacy or mutual talks. Another factor leading to the crossing of the threshold is the search
for 'national security' and its counter 'deterrence'. The danger of this dichotomy-based ideology
is that it is reductionist and negates the option of having alternatives. It creates a situation where
there are only two outcomes --- a state of limbo where adversaries are pointing their weapons at
each other or the setting off of weapons that starts a nuclear apocalypse in which there would be
no winners or victors but only victims. Thus, the only way to prevent the crossing of the nuclear
threshold is to destroy the nuclear threshold by destroying nuclear weapons for good.

A central aspect of the supposed rationale behind making and maintaining nuclear
weapons is the principle of deterrence. Deterrence, it is suggested, keeps the enemy from
becoming aggressive, maintains peace, and prevents war. The focus of deterrence theory is on
the issue of ensuring nuclear security. The contradictory nature of this type of security is that it
ceased to exist the moment nuclear weapons were made. Once the bombs had been made by
America, it was just a matter of time before other industrial nations followed suit and negated the
illusion of 'national security'. For technological societies, security and maintaining its hegemony
is of paramount importance. Nuclear weapons draw on the basic elements of nature and also
have infinite power for destruction which it may or may not use. By sparing the opponent, they take on the form of objects of worship or guardians of peace and stability. However, this impression does not come without a psychological price. It requires a strong effort to ‘oversee’ the extent of destruction in the event of a nuclear war. The agents of nuclearism try to offer the rational explanation of deterrence policy and its value in preventing war and aggression.

Now that we have examined the economical, political and social developments that created the conditions for the development of the genocidal mentality, let us look at the psychological developments and its impact on the human psyche as a result of the genocidal mentality. The genocidal mentality took roots in many subtle ways which enabled individuals like Nazi doctors to be capable of committing mass murders while going on about normal lives. Lifton argues that there are certain psychological mechanisms that help people to overcome their guilt of having harmed others. These psychological mechanisms blunt human feelings and render the mind incapable of feeling the pain experienced by others. These mechanisms are

1. Dissociation or Splitting
2. Psychic Numbing
3. Doubling
4. Brutalization

Dissociation or Splitting is the process by which a part of the mind gets separated from the rest and the different parts tend to develop the ability to function as independent entities, like carrying out acts of violence that would induce guilt in the normal unified mind. The separation helps the primary part of the mind to remain ‘protected’ from the horrors perpetuated by the fragmentary mind. The breaking of the mind helps the primary part to claim (partial) ignorance about the crime committed by the ‘other’ part. This helps an individual to carry out acts of
violence while leading a normal life. In the case of nuclear scientists, they undergo a splitting of their personality and even develop a "weapons self" and a normal self which helps them to lead normal lives.

Psychic Numbing is a dissociative process carried out by the mind in order to reduce the feeling of remorse that occurs after acts of violence. The reduction in ability to feel or as in some cases, a complete lack of feeling leads to a situation where an individual is able to function as an excellent analytical mind that can carry out complex functions without bothering to have to think about the moral repercussions of their actions or taking responsibility for them.

Doubling is a mental process that enables an individual to have an alternative self that is able to function independently, saving the actual self from experiencing guilt and the contradictory nature of beliefs and actions in relation to destructive power of nuclear weapons. The mind is forced into believing that the individual must do the very thing the deterrence policy is made to stop. It enables an individual to remain an effective killer and humane healer at the same time, like in the case of Nazi doctors.

Brutalization is the psychological mechanism that gives individuals the ability to carry out regular and repetitive actions that harm others. The description of the way this psychological mechanism works by Lifton and Markusen is worth quoting in full:

What could appear to be stupidity in an individual is better explained as an ideological constellation, segmented from the rest of the self, within which ordinary, intellectual and moral standards were negated. Numbing, denial, and doubling may all have been involved in ways that helped one hold on to many beliefs in the face of powerful evidence to the contrary, and even to act on them in
a place like Auschwitz (performing selections and experiments) as victorious
Russian armies were making their way to the camp. (196).

They also suggest that there is a totalistic aspect of nuclear weapons,

Nuclearism... has become totalistic in its relationship to science, to ultimate
power, and to the American religion of anti-communism and the Soviet religion
of anticapitalism. Totalistic projects seek to "stop history" by means of a once-and-for-all resolution of problems of death and human continuity. They seek to
cut off the flow of changing images and forms that make us, as human beings, the
historical animal. (88).

The impact of nuclearism is also in its 'complementarity' as pointed out by Oppenheimer.

Nuclear weapons have the power of "killing to heal". "Nuclearism makes this claim...to achieve
collective vitality and a sense of purification by killing others...to achieve an intense form of
shared immortality while pressing for arrangements that could end all life. Killing to heal is both
the extreme edge and the essence of nuclearism." (97). Oppenheimer made use of findings of
Neils Bohr at two levels—in the making of the atom bomb and at developing ethical standards to
defend the use of weapons. In Genocidal Mentality Lifton and Markusen point out that the
concept of complementarity was originally put forward by the Italian physicist Emilio Segre
(112). Lifton and Markusen point out that this joining of contradictory factors in the minds of
individuals or rather the human mind assumes the joining, which is called Blending.

"Yet such is the mind's way of functioning...anyone's—that the very holding of
the two images simultaneously causes one to create or assume precisely that
reconciliation. Indeed, there readily takes place a blending of ultimate destruction
and human redemption, resulting in the mystical expressions of nuclearism...”

(112).

An example of Blending operating is the case of nuclear weapons scientists like Leo Szilard and Eugene Rabinowitch who opposed the construction of nuclear weapons after having worked on them in the past. Some of them formed the Bulletin of Atomic Scientists in order to spread the awareness of the nuclear threat. At the same time, many others like Edward Teller and Enrico Fermi continued to work actively on nuclear weapons. Most scientists were, however, neutral in their response to nuclear weapons programmes. Interestingly it was these ‘neutral’ scientists who knew the genocidal nature of nuclear weapons and hence opposed it; but who nevertheless carried on and kept the nuclear weapons programmes active.

However, the human mind would still find it difficult to accept the logic of making and keeping nuclear weapons without psychological conditioning during which a part of the mind breaks away from the rest of it. The human mind is fragmented so as to able to carry out actions that lead to ‘doing the undoable’ in order to prevent it from suffering remorse or guilt. This breaking of the mind is an instance of Dissociation. The term Dissociation was first coined by Pierre Janet to refer to the separation of mental processes from the rest of the mind or ideas from corresponding feeling. It may include other mechanisms like Psychic Numbing, Doubling, Disavowal, and Denial. A common feature of both Psychic Numbing and Denial is the withdrawal of empathy for the victims. Empathy is the understanding and the ability of entering into feelings of another by virtue of subconscious feeling for fellow beings. Emotions like empathy enable an individual to lead a normal and sane life and the mind is able to maintain its equilibrium. With the onslaught of nuclearism the mind is forcefully exposed to a type of threat it is incapable of coming to terms with due to the threat of unlimited power for destruction. In the
face of such a threat when the mind is coerced into carrying actions that can harm others, without experiencing guilt, it undergoes a form of partial disintegration. Empathy, an integral part of human psyche, when withdrawn leads to a form of vacuum which must be filled. In this case dissociation takes place in which feelings are separated from thinking. The process involves looking at people not as fellow beings but as mere ‘friends’ and ‘foes’; ‘us’ and ‘them’. By thinking of ‘them’ as the ‘other’, the mind is yoked into thinking without feeling any empathy, that the ‘other’ is ‘evil’ and must be destroyed as a solution to all problems. According to Lifton and Markusen, Dissociation makes it possible for the subject to believe things which would be normally considered foolish.

What could appear to be stupidity in an individual is better explained as an ideological constellation, segmented from the rest of the self, within which ordinary intellectual and moral standards were negated. Numbing, denial, and doubling may all have been involved in ways that helped one hold on to many of these beliefs in the face of powerful evidence to the contrary, and even to act on them... (196)

By using dissociation and various other forms of psychological adjustments, nuclear weapons scientists were able to carry out their work of making weapons of genocide without experiencing guilt of any form.

Let’s look at different psychological adjustments adopted during the development of the genocidal mentality in which individuals acquire the mentality of willingness to commit mass murder or to allow them to happen as a normal part of their routine lives and institutions. In other words, the ‘abnormal’ is perceived as ‘normal’; rather the human psyche has been so conditioned by the genocidal mentality to ‘change’ the meaning of reality. The genocidal mentality makes
people to look at nuclear threat merely as an everyday matter by citing loyalty to the country or society. Thus genocidal mentality alters people's perception, due to which people who instinctively have a species' mentality (people are generally bound by feelings for fellow beings in spite of mutual differences) begin to have genocidal and species' mentality simultaneously. As a result, the 'forbidden' becomes 'normal' and accepted.

The acceptance of nuclear weapons as an essential and normal part of ordinary human lives, is made possible by the dual life led by those who knew about the nature of the threat facing them but pretended as if there was no threat at all. This normalization of nuclear threat took place gradually as a series of adjustments in popular thinking in the case of Nazis as well as nuclear weapons professionals. In both cases, members of healing professions like doctors and psychiatrists were firstly brought to believe that fear of nuclear weapons was not normal behaviour and that there must be faith in being able to fight and win a nuclear war, like a conventional war.

In the second stage, through steps like the publication of works like *Living with Nuclear Weapons* by think tanks like Harvard Nuclear Study Group, attempts were made to change the popular outlook towards nuclear threat. It was suggested that living with nuclear weapons were "our only hope", disarmament is "a form of atomic escapism", and a "dead end". Efforts were made to alter the perception of reality by suggesting that nuclear weapons were a danger but it was still necessary to be willing to take the risk of using them if necessary. People were asked to take a 'balanced' view instead of choosing between the provocative policies which fuelled aggressive arms race, on one hand and the soft policy of appeasement on the other. The actual threat lies in the nuclear normality, the illusion of which is created through the proposed middle path which seeks permanent maintenance and improvement of nuclear weapons; rejects no first-
use policy and seeks a “credible nuclear deterrent”. The deterrent forms the basis of Joseph Nye’s argument that deterrence depends on the non-use of nuclear weapons by demonstrating a willingness to use them at some point (52). Thus the absurdity of nuclear weapons is portrayed as essential, rational, and normal.

In the third stage of nuclear normalization, technology is put forth as a solution to build defences against nuclear weapons. The absurdity lies in making nuclear weapons and then making weapons to defend against the initial weapons. Thereby, a vicious circle is formed which takes the form of an arms race. Lifton and Markusen point out the extent of the nuclear threat, the illusions, absurdities, and normalization that occur.

The first wave established illusion of preparation (one can take effective steps to be ready for nuclear war), of protection (via shelters and evacuation), of limited nuclear war (one can stop the “exchange” at a certain point), and of viable recovery or even victory...The second wave of nuclear normality focuses on the beneficence of the weapons (they are a necessity for preventing war) and of human helplessness before them (our only choice is to learn to “live with them”). The third wave puts forward the illusion of nuclear invulnerability (the idea that we can reverse the fundamental truth of the nuclear age- that of absolute, universal vulnerability) (49).

These phases are also marked by a transfer of decision-making on the use of nuclear weapons for making the world safer by handing over the power to make choices to machines so that ‘rational’ decisions are taken instead of human decisions that are based on a collective species’ consciousness. All these steps lead to nuclear normality helping to create a mass murder of the
entire human species, an acceptable action in order to make the world safe from nuclear weapons.
Notes and References


Ibid. 216-217.

Ibid. 108-110.


Lifton, Robert Jay and Eric Markusen. *The Genocidal Mentality: Nazi Holocaust and Nuclear Threat.* London: Macmillan London Limited, 1990. 19-21 Through extensive interviews with former defence planners, analysts and strategists, Lifton carries out an analysis of the evolution of strategic bombing from the Second World War onwards. This particular section of the book points out that from the Second World War onwards, the bombing targets changed from military targets to industrial facilities and later began to include civilian population too. The civilian population living nearby industrial complexes began to be seen in terms of labour force that carried out industrial production by strategic bombing planners. The period was also marked by the end of exempting civilian population from the list of targets, as had been the practice until then. The perception of innocent people who were commodified as mere cogs in the juggernaut industrial production led to the formation of the military perception that people were expendable.

Sherry, Michael. *The Rise of American Air Power: The Creation of Armageddon.* New Haven and London: Yale University Press, 1986. Lifton quotes Sherry and argues that the use of aeroplanes in warfare is an instance of technology which had potential for positive applications, being used for destructive purposes. The aspect of technology is applicable in the case of nuclear weapons as well.
Lifton says about his previous work with Markusen that, "We noted that many people were invoking comparisons with the Holocaust in discussing nuclear dangers, but we felt that these comparisons needed to be made more systematically and in ways that stressed differences as well as parallels. The form our books came to take, as worked out together, emerged primarily from my discussion of general themes of genocide at the end of my study of Nazi doctors. And the book's conceptual principles derive mostly from my earlier work. Markusen provided insight from his study of various forms of governmental mass killing as well as specific analyzes of American nuclear-weapons policies...I related my work on Hiroshima to psychological issues surrounding worldwide nuclear threat...For all these studies I conducted extensive interviews, as a way of getting directly at the mind-sets of the people involved, of learning (in Isaiah Berlin's phrase) "what it must have been like [for them] to think, feel, act" I obtained an empirical body of data from which I could draw the shared themes in question, and then raised further questions about the social and historical significance of these shared psychological themes...I also made use of interviews in the present study, in this case with scientists who have done weapons work, nuclear strategists, and retired military officers of high rank...presidential advisers...physicists who had been involved with weapons work..."Lifton, Robert Jay and Eric Markusen. The Genocidal Mentality: Nazi Holocaust and Nuclear Threat. London: Macmillan London Limited, 1990. Preface X.


Lifton suggests that "the feeling that traditional ideologies, styles of group and family life, and patterns of communication are irrelevant and inadequate for contemporary life, (a tendency which I have also called a break in the sense of connection.) I suggested that this break is only partial, and that lingering influences of the past have a way of making themselves felt persistently within the individual character structure, creating a series of psychological conflicts which in turn adds both pain and zest to their lives. Now I wish to carry this analysis further by delineating three more or less specific patterns of imagery characteristic for Japanese youth in their efforts to break out of their historical dislocation and re-establish a sense of connection with viable ideas and human groups. This imagery includes emotionally charged convictions about one's relationship to his world (ideology) as well as a sense of personal development within the psychological idiom of these convictions (self-process). I shall focus upon the relationship of this imagery to the individual's sense of time: that is, his means of symbolizing past, present, and future, both in his conscious beliefs and in that part of his emotional life which is inaccessible to, and often in direct conflict with, conscious beliefs. "Individual Patterns in Historical Change: Imagery of Japanese Youth." Comparative Studies in Society and History Vol. 6.No. 4 (1964): 369-383.

Goldhagen, Daniel Jonah. Hitler’s Willing Executioners, Ordinary Germans and the Holocaust. London, 1996. http://www.commentarymagazine.com/. 17 December 2009. He says, “The strength and originality of this [Lifton’s] book derive from the extensive interviews Lifton conducted with former Nazi doctors and nonmedical professionals, as well as with eighty former Auschwitz prisoners who worked under the Nazi doctors. By weaving together their accounts with archival and secondary material, Lifton has produced a persuasive narrative of the development of the Nazis’ extermination practices and of the ease with which healers became killers. Moreover, he demonstrates convincingly a point frequently lost in scholarly and popular treatments of the Holocaust: before coming to Auschwitz, the Nazi doctors, like many of the other executioners, were of very different backgrounds and personalities, held widely ranging attitudes to Nazism, and were infected in varying degrees by anti-Semitism. They were ordinary Germans.”


Ibid., Levene suggests that “…the leading modernizing states certainly did commit, at the very least, proto-genocides as well as a number of other practices, which under today’s international rule book—created largely out of western Enlightenment thought and practice
would be considered dubious if not downright illegal. These included repeated recourse to war, conquest, and above all, slavery. These practices, however, were crucial in providing these states with shortcuts to capital accumulation, which in turn fuelled their technological cutting edge and industrial revolutions and which, by the mid to late-nineteenth century, had assured for them an entirely hegemonic position around the globe. Not only was this the beginning of a new world order, but a “new world pecking order,” in which these states set the tune and everybody else was expected to dance to it... This would suggest that the twentieth century practice of genocide has more in common with states which are new, or are heavily engaged in the process of state and nation building, or are redefining or reformulating themselves in order to operate more autonomously and effectively within an international system of nation states. Thus, polities which were latecomers to it, including potentially very powerful ones like Russia and Germany, finding themselves at a disadvantage vis-à-vis the frontrunners, had to consider how best they could make up lost ground. Willingly or unwillingly taking on board much of the leaders’ administrative, military, and infrastructural aspects, superficially seemed the only way forward. The ensuing cultural, social, and institutional borrowings set in motion the most profound reformulation of economies and societies. One of the key dilemmas for such late nation states, however, was not simply the requirement to borrow from a culturally alien template but, once acknowledged as players within the system, how to keep up with it. Its regulators and supervisors—the leader states—demanded of new candidates an implicit undertaking that they would transform themselves into polities which would operate effectively and coherently according to its rules. But being fundamentally and dynamically fuelled by capitalism—by its very nature a cutthroat business—no new state could afford to stand still and had, rather, to find ways and means of staying afloat within this dominant political economy. Levene, Mark. "Why is the Twentieth Century the Century of Genocide?" Journal of World History Vol. 11. No. 2 (2000) 317.


34 According to Lifton and Markusen, Emilio Segre posits that “Two magnitudes are complementary when the measurement of one of them prevents the accurate simultaneous measurement of the other. Similarly, two concepts are complementary when one imposes limitations on the other. The definition seems to suggest that one can simultaneously imagine the bomb as destructive and evil on the one hand and as a means of human redemption on the other, but that the two positions cannot be combined or reconciled with one another, because that would lead to the mismeasure or distortion of one of them. The concept of complimentarity finds