

**Postmodernism and Cold War Military Technology in the
Fiction of Don DeLillo and William S. Burroughs**

Melanie Suzanne Parker

Ph.D

Department of English Literature

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Chapter Three: Posthuman Potentials in William S. Burroughs' *The Place of Dead Roads* and *The Western Lands*

Kim knew he was in a state of Arrested Evolution: A.E. He was no more destined to stagnate in this three-dimensional animal form than a tadpole is designed to remain a tadpole [...] Kim knows that the first step toward space exploration is to examine the human artefact with *biologic* alterations in mind that will render our H.A. more suitable for space conditions and space travel... We are like water creatures looking up at the land and wondering how we can survive in that alien medium.¹

Burroughs has clearly stated that *The Place of Dead Roads* (1983) is intended to be a sequel to *Cities of the Red Night* that works to 'clarify and reiterate similar themes'.² However, the random viral characters prominent in *Cities*, and the seminal Nova trilogy, are replaced by more sophisticated hybrid beings engineered in the controlled environment of the laboratory. Whereas the experimentation taking place in the earlier novels stemmed from the scientific ascendancy of the control apparatus, the test-tube in *Place* further signifies Burroughs' quest for positive future potentials and evolutionary development. Previously, the intoxicated human body had involuntarily crossed 'a liberating boundary' into a 'zone' exempt from the social containment and behavioural practices devised by the control machinery.³ The infected subject in *Cities* broke free from these constraints by revelling in the indiscriminate chaos of psychiatric, sexual and cellular degradation. Therefore, external viral attack and the sinister medical experimentation of the 'Pickle Factory' were transformed by the powers of narrative potentiality to become the means for an emancipation of body and mind.

Burroughs continues to investigate similar processes of defiance and becoming in *Place* and the final novel of the trilogy, *The Western Lands* (1987), by directing his Cold War counter-history toward the role of scientific and technological advancement in the quest for liberation from global domination. The scientific methodologies sanctioned by the agents of control are inverted to become

¹ William S. Burroughs *The Place of Dead Roads*, (1983, Flamingo, London, 2001), 43, hereafter cited as *P*.

² William S. Burroughs, 'Afterword: My Purpose is to Write for the Space Age' in *William S Burroughs at the Front: Critical Reception 1959-89*, eds. Jennie Skerl and Robin Lydenberg (Urbana: Southern Illinois Press, 1991), 267.

³ Kendra Langeteig, 'Horror Autotoxicus in the Red Night Trilogy: Ironic Fruits of Burroughs's Terminal Vision', *Configurations* 5.1, (1997), 154.

instruments of resistance and transformation for Burroughs' band of revolutionary characters, and therefore the research systems informing Cold War weapons stockpiling and game logic form a fictional conduit to new biotechnological freedoms. This reversal permits a carnivalesque celebration of posthuman potential that replaces the bodily defiance achieved by the viral subjects of the previous novels.

In this chapter, then, I will contemplate how the remainder of the Red Night trilogy uses Cold War technological and scientific innovation in the quest for new subjective freedoms, bodily configurations and utopian realms of possibility. I will consider how the counter-communities in these novels use biotechnological research to develop and propagate their resistance of the control apparatus. These research initiatives not only become the basis for biological weapons programmes to destroy hierarchical control, but also the main method in the quest for bodily transcendence and planetary escape. Burroughs' insurrectionist characters use genetic experimentation, human cloning and inter-species cross-breeding programmes in the quest for posthuman potentiality and spatio-temporal freedom. By analysing these fictional experiments in comparison with Cold War biotechnologies, I will ascertain their relative success as utopian escapes from military-scientific ascendancy.

Like *Cities*, *The Place of Dead Roads* is divided into three interlinking books or episodes; however there are only two clearly defined narrative strands merging within the textual framework. Whereas *Cities* was predominantly set around an eighteenth-century pirate commune, *Place* opens with a nineteenth-century American frontier setting designed to exemplify the dissident nature and performative conflicts of the 'Wild West'. In the opening section, taking the form of a newspaper report, the reader is introduced to the central character, William Seward Hall, a writer who uses the pen name 'Kim Carsons'. The report dated September 17, 1889 details a shootout between Hall/Carsons and his adversary, Mike Chase. It is recorded that Hall and Chase appeared to kill one another during this incident at Boulder, Colorado, but that evidence had since come to light showing that 'neither gun had been fired, and both men were killed by single rifle shots fired from a distance' (P: 13). An unnamed 'shootist' is introduced into the plot, but this mysterious figure remains an enigma for the remainder of the novel. Henceforth, the narrative evokes incidents from Kim Carson's life prior to his death at Boulder, with great disruption to narrative linearity and temporal sequencing. Kim and his counterparts are destined to return to the

scene of the shootout through continual instances of time travel, which reconfigure the event with different dates and locations such as Manhattan in the 1920s, and Boulder a decade after the first recorded shooting incident.

Burroughs has stated that *The Place of Dead Roads* refers precisely to the 'roads' or pathways traversed by the dead, and as such the novel can be considered another 'book of the dead' alongside its 1970s predecessor *The Wild Boys*.⁴ Extended references to the *Egyptian Book of the Dead* and the transcendental properties of the human soul work to demonstrate this, and reveal the interchangeability of Burroughs spatial and spiritual missions in the Trilogy. In *Place* particularly, this contemplation of the afterlife centres on the characters' purgatorial state between the realms of the living and the dead, a state reflecting the human developmental impasse. From the outset, Kim Carsons is bound to the moment of death as it becomes apparent that the shootout is being controlled by a 'film director' ordering the action taking place on 'set':

Kim shoots a hole in the sky. Blackness pours out and darkens the earth. In the last rays of a painted sun, a Johnson holds up a barbed-wire fence for others to slip through. The fence has snagged the skyline....a great black rent. Screaming crowds point to the torn sky.

"OFF THE TRACK! OFF THE TRACK!"

"FIX IT!" the Director bellows....

"What with, a band-Aid and chewing gum? Rip in the Master Film....Fix it yourself, Boss Man." (P: 17)

This signifies a return to the 'Reality Studio' recordings first introduced in the Nova trilogy, which binds the characters to the predetermined scripting of a pre-recorded universe. The action unfolding on this film set appears to take on the hyperreality and suggestion of the cinematic image. Hence, the last rays of a 'painted sun' give way to darkness, and the 'screaming crowds' gather like a swarm of film extras to point at the torn backdrop of a painted sky. The cinematic frame promotes a multiplicity of semiotic renderings, in much the same way that Burroughs' fiction embraces the limitless potentiality stemming from a collision between the world of the reader and the fictional 'zone'. The Reality Studio dictates the production of the 'Master Film', which in turn attempts to shape and influence history and subjective experience. However, the 'Director' appointed to maintain this status quo is unable to take charge of the chaos that ensues when the boundaries of the Master Film are

⁴ William S. Burroughs, *The Wild Boys: A Book of the Dead*, (London: John Calder, 1982).

compromised. To a certain extent, Kim is able to resist this control performance by shooting a hole through the prescribed mise-en-scene of the studio film set. His associates, the 'Johnson Family' are able to escape via this rupture into another spatial and temporal dimension, in an act of defiance reviving the binary opposition between the Nova Mob and the Nova Police. Even though Kim and the Johnsons are prone to a purgatorial existence and developmental stagnation, Burroughs has provided these characters with sufficient agency to challenge prescribed versions of 'reality' with alternatives located beyond the rip in the Master film. The Reality Studio may impose one reality, but Kim has found a weakness in their recordings resulting from the mise en abyme of this cinematic panorama. He is able to create another space that breaks beyond the frame of the Master Film, an unfixed space beyond authoritarian manipulation. The repeated action presented here takes place in an 'interzone', a fictional possible world akin to those potential realms galvanised in *Cities*, a space merging a number of simultaneous realities. This permits a degree of potentiality to enter the narrative frame in contrast with the dogmatic reality script, because characters attempt to harness these ontological shifts as a basis for the production of representational, political and biological rewrite strategies designed to overthrow the current tenets of control:

We will fight any extension of federal authority and support States' Rights. We will resist any attempt to penalise or legislate against the so-called victimless crimes ... gambling, sexual behaviour, drinking, drugs. We will give all our attention to experiments designed to produce asexual offspring, to cloning, use of artificial wombs, and transfer operations. (P: 92)

As this collective testimony demonstrates, the Johnsons' efforts take the form of a manifesto designed to organise society's disaffected into specialised units to attack the power base on every effected level, from social regulation and political legislation to scientific research and knowledge acquisition. They intend to redirect the 'life sciences' toward experimentation designed to procure a race of new Johnson beings. Thus, potentiality exists in several guises, first through the societal proposals embedded in these counter-narrative routines, and second, in the scientific and technological rewrites cited as integral to their success. This manifesto for a Johnson Family takeover is reminiscent of the 'Articles', the tender for liberal existence adhered to by the pirate colony in *Cities*; however the Johnsons' covert insurgency programme takes this format one stage further by centring all interests upon bodily as

well as societal alterations. In *Place* and *The Western Lands*, these ‘Big Science’ rewrite potentials take the form of genetic manipulation, the reconfiguration of human reproductive functions. It is important to note that the previous rewrite strategies explored through the fiction, including the early cut-up and fold-in techniques, provided one kind of remedy for representational hegemony, but that at this point Burroughs felt that he had exhausted all avenues in relation to these artistic techniques. In order to escape the cyclical return to developmental stagnation and systems of binary conflict, the remainder of the trilogy focuses on the creative processes facilitating potential biotechnological narratives as escape-routes from a state of ‘arrested evolution’:

To my way of thinking, art, and the function of art – of any creative thinking, scientific thinking – is to make us aware of what we know and don’t know that we know [...]. Once it becomes established, this expansion then becomes a permanent part of consciousness.⁵

In this sense, the realms of artistic licence and imagination, and the capabilities of systematic scientific experimentation merge in Burroughs’ fiction through the enterprises of his outlaw characters. This unification makes possible the kind of expansion of consciousness otherwise unavailable to the developmentally redundant subject. By harnessing powers of biotechnology and narrative illusion Burroughs attempts to liberate human life and actions from the regulatory practices defining social reality, an exercise he formulated as a reflection of the teachings of Hassan i Sabbah, the eleventh-century assassin and cult leader to which Burroughs’ accredits the maxim ‘nothing is true—everything is permitted’: ‘Yes, I would say that. If nothing is true, then everything is permitted. That is, if we realize that everything is illusion, then any illusion is permitted. As soon as we say that something is true, real, then immediately things are not permitted.’⁶ Fiction, for Burroughs then, should be a vehicle for generating a fantasmic space beyond confining master narratives of global control and historiographical cause and effect.

As previously outlined in relation to *Cities*, Burroughs’ notion of fictional possibility works as a form of counter-narrative to destabilise and challenge the

⁵ Burroughs’ 1980 interview with Robin Adams, ‘Viral Theory’ in *Burroughs Live: The Collected Interviews of William S. Burroughs 1960-97*, ed. Sylvère Lotringer, (New York: Semiotext(e), 2001), 467.

⁶ William S. Burroughs and Daniel Odier, *The Job: Interviews with William S. Burroughs*, ed. Daniel Odier, (New York: Grove Press, 1970), 90.

binary networks and information systems directing Cold War/war game conflict. This is where Burroughs' treatment of fictional potentiality begins to detach from the theoretical standpoints surrounding Cold War hostility and technological application. As we are already aware, Paul Virilio's 'pure war' of strategic deterrence and technological acceleration focuses on the threat posed by the possible 'speed' of delivery in orchestrating a nuclear attack. Opposing forces have the means to negate one another with simultaneous networked technological assaults that work to undermine traditional military responses and geopolitical strategies. At this stage, traditional concepts of war disintegrate because strategic deterrence has instigated a 'tactical' arms race based on the 'perfection of conventional and nuclear vectors of delivery, the acceleration of their speed, [and] the multiplication of explosive charges'.⁷ This increase in technological productivity and momentum has consequences for our understanding of the relationship between space and time. Virilio announces the arrival of 'space-speed' a state of immediacy that reduces actions and responses into a singular simultaneous act.⁸ Jean Baudrillard concurs that a form of global escalation has taken place due to technological efficiency, and that as a result, identity and value swell into an 'obese' postmodern system of 'potentialization' beyond our control:

It seems that things [...] can only redouble themselves in their exacerbated and transparent form, as in Virilio's 'pure war' [...]. Spatial exploration likewise is a *mise en abyme* of this world. Everywhere the virus of potentialization and *mise en abyme* carries the day, carries us towards an ecstasy which is also that of indifference.⁹

For Baudrillard, potentiality creates a system of equivalences and indifference where even the technological capabilities permitting space travel and exploration become reflections of this world. In this sense, productivity and potential no longer initiate human progress, but rather signify a degeneration of the human condition. At this critical juncture, we may, then, pose a question about how successful Burroughs' fictional potentials are as Cold War counter-histories working to undermine the scientific applications of the control system. Undoubtedly, *The Place of Dead Roads*

⁷ Paul Virilio, 'Critical Space', (1984), *The Virilio Reader*, ed. and trans. James DerDerian, (Oxford: Blackwell, 1998), 66.

⁸ *Ibid.*, 66.

⁹ Jean Baudrillard, *Fatal Strategies*, ed. Jim Fleming, trans. Philip Beitchman, and W.G.J. Niesluchowski, first published 1983, (London: Pluto, 1999), 41.

and *The Western Lands* use the control networks and knowledge systems propagating military over-potentialization. Consequently, we must contemplate whether the remainder of the Red Night trilogy is a revolutionary narrative escape from the acceleration of game planet device, or an inescapable assimilation into the scientific and technological networks it attempts to transcend. Before this question can be sufficiently addressed we must first consider the counter-historical method Burroughs employs in both novels. This includes the covert counter-cultural assaults of Burroughs' insurgents, and their manipulation of military derived biotechnological research and engineering in the quest for post-human bodily development and spiritual transcendence.

The Johnson Family: 'A Potential America'

Burroughs' critical separation from the control monopoly and military-scientific domination form an attempted rejection of postmodern ennui and networked subjectivity. Kim's all-male counter-community, the Johnson Family, devise intricate plans to infiltrate U.S. corporate and political power structures in an attempt to destabilise their power base through covert acts of rebellion. Whereas the pirates in *Cities* staged an explicit assault upon the hierarchy, the Johnson outlaws plan secret manoeuvres for minimal detection:

As soon as Kim started organizing the Johnson Family, he realized how basically subversive such an organization would appear to the people who run America. So the Johnson Family must not appear to these people as an organized unit [...] He planned towns, areas, communities, owned and occupied by Johnsons, that would appear to outsiders as boringly ordinary or disagreeable, that would leave no questions unanswered. (P: 130-31)

This fragmented 'underground' insurgency takes the form of Kim's strategic operation 'Big Picture', conveniently named to imitate and therefore undermine the 'directorial' control of the Reality Studio and their domineering film studio monopoly of the planet. He organises resistance units to target and destroy the American power base. Moreover, Kim's plans aim to compromise the scientific and technological applications fuelling this totalitarian networked existence by penetrating the structures ordering the direction of scientific research:

Soon Kim will have enough money to implement the first stage of his plan – Big Picture, he calls it – his plan for a Johnson Family takeover. He will set up a base in New York. He will organize the Johnsons in Civilian Defense Units [...] He will buy a chemical company with research facilities where he will develop sophisticated biologic and chemical agents. He will start a small arms factory, reserving the special weapons for the use of the Johnson elite. (P: 98)

By using ‘Civilian Defense Units’ to take possession of a biochemical research facility and creating a munitions factory, Kim redirects the power of biologic and chemical ‘agents’ so that they double back on the control monopoly. The Johnson Family double-agents are placed into Civilian Defense Units to degrade the control system from within in the same way that these toxic agents are redeployed to destroy their hostile origins. Therefore, the resistance takes on a two-pronged covert assault intent on suppressing government domestic interventions, while simultaneously commandeering the military-scientific complex underpinning all official socio-political interactions.

The Johnsons represent a ‘potential America’ (P: 154) based on a reversal of escalating conflicts, the depletion of natural resources and the initiation of biologic alterations in the human structure to prepare the species for a ‘non-body’ route into space. Elements of this potentiality can be traced right back to the Nova Police, the outlaw ‘Wild Boys’ and the ‘retroactive utopia’ proposed by the pirate counter-community in *Cities*. Each of these groups deploys the anarchic power of satire. In other words, they mirror and imitate the opposition, and in doing so are able to subvert and undermine control with the grotesque exaggerations of the carnivalesque. Kim and his Johnson ‘elite’ constitute Burroughs’ most amplified version of this satirical impulse. However, they also constitute his most powerful revolutionary force so far, an organisation intent on a biotechnological global takeover. The Johnson’s attempt to redefine the social structure and the constitution of the human species signifies an escalation of Burroughs’ quest for utopian transcendentalism in the face of military-scientific dominance, a pursuit identified by Ihab Hassan in his work on ‘selves at risk’:

Still one may ask: Quest? Adventure, in the fading glare of our century? In this era of satellites and supersonic jets, of the ubiquitous McDonald’s and pervasive Panasonic? In our coddled jacuzzi culture, our cybernetic, if not quite cyborg, society of acronyms and first names, where acedia measures lives between hype and fix? Indeed, the very name quest may strike some as quaint, lacking

as it does deconstructionist brio, Marxist bravura, or feminist coloratura. Yet the spirit of quest endures, unquavering, with stiff upper lip.¹⁰

Hassan seems to be addressing the enduring desire for quest and adventure as a reaction to our global culture of cybernetic feedback and networked information. The quest narrative keeps alive the notion that there are still uncharted frontiers to be crossed, unknown territories as yet untouched by the ordering principles of a technocracy. Therefore, it provides a form of psychological escapism for those irreversibly integrated into the information grid. There may be no such space left on the face of the planet, but the quest narrative may offer the means to initiate a fictional plane on which to explore these liberating fantasies. Burroughs exploits the enduring, restless spirit of the American quest, the desire to seek, pursue and locate a symbolic space for self-realisation and human development. A space that Hassan describes in ambiguous and revolutionary terms: 'Moving out, the quest also found its need for otherness in the wilderness, and found its motives in the eternal search of misfits, outlaws, scallywags, crackpots, vagrants, visionaries, individualists of every stripe'.¹¹ The Johnsons signify the 'otherness' pervading the uncharted margins or borders of the American frontier, and the quest narrative provides a unifying space for these outcasts 'of every stripe' to thrive within. Hassan views the quest narrative as a hybrid space in much the same way that Burroughs describes his fictional interzone, archaic in places and yet simultaneously post-industrial and decolonised everywhere. The 'unreal America' contained in this hybrid zone becomes the foundation for quests akin to those found in Burroughs' imaginary, ventures that attempt to recover a positive reality and 'constitute significance' in individual and collective experience.¹²

For Fredric Jameson, 'the utopian ideal keeps alive the possibility of a world qualitatively different from this one', an alternative world akin with Burroughs' revolutionary brotherhoods and fictional possibilities.¹³ Jameson remarks on the 'reawakening' of the utopian impulse during the 1960s onwards through various examples of cultural optimism and activism, from student protests to the growing

¹⁰ Ihab Hassan, *Selves at Risk*, (Wisconsin: The University Press of Wisconsin, 1990), 3.

¹¹ *Ibid.*, 5.

¹² *Ibid.*, 5.

¹³ Fredric Jameson, 'Of Islands and Trenches: Neutralization and the Production of Utopian Discourse', in *The Ideologies of Theory: Essays 1971-86*, (Minneapolis: University of Minnesota Press, 1988), 75-101.

popularity of the sci-fi genre in fiction and film. However, he stipulates the danger that utopian idealism brings with it an unfortunate uniformity, a form of conformity that excludes rather than eradicates social problems. In his essay *Of Islands and Trenches: Neutralization and the Production of Utopian Discourse* (1977), Jameson considers Sir Thomas More's sixteenth-century conceptual utopia in terms of this process of exclusion and rejection. He notes that 'many of the unpleasant tasks associated with the market and commercial activity' are pushed 'outside the city walls'.¹⁴ In addition, war is removed from More's 'anti-real' world via a process of disassociation, in other words, foreign mercenaries are used to fight battles on Utopia's behalf. The problematic features of the actual world, economic systems and political conflicts remain unsolved because they are 'ejected and then re-established outside the charmed circle that confirms the utopian commonwealth'.¹⁵ Here, utopian conformity suggests the repression of antisocial impulses and the avoidance of violence rather than the creation of a social system to address and rectify these problems with decisive action. In contrast, Jameson proposes:

A Utopia of misfits and oddballs, in which the constraints for uniformization and conformity have been removed, and human beings grow wild like plants in a state of nature: not like the beings of Thomas More, in whom sociality has been implanted by way of the miracle of the utopian text, but rather those [...], who, no longer fettered by the constraints of a now oppressive sociality, blossom into the neurotics, compulsives, obsessives, paranoids and schizophrenics whom our society considers sick but who, in a world of true freedom, may make up the flora and fauna of 'human nature' itself.¹⁶

Jameson's vision of a 'utopia of misfits' permitted to develop unconstrained by nature and limiting social norms and values shares an affinity with Burroughs' counter-communities, as both situate liberty in behaviours and actions denounced by the regulating social force. The quest in *Place*, then, constitutes a reversal of the utopian model of exclusion by creating a potential utopia based around those groups traditionally excluded from the social ideal. In fact, the groups granted performative freedom and utopian potential in the Red Night trilogy are the very sections of society considered to be the 'problem' within a system of national containment and Cold War anxiety. Racial, behavioural and sexual heterogeneity instigates a schizophrenic hybrid community in *Place*, a possible society that excludes and

¹⁴ Ibid., 75-101.

¹⁵ Ibid., 75-101.

¹⁶ Ibid., 75-101.

attempts to eliminate containment ideologies and traditional systems of control. Conversely, where Jameson appears to question the defining borders of what constitutes 'human nature' by exploring those traits condemned by the social norm, Burroughs aims to transgress these definitions and boundaries altogether by situating utopian promise in hybrid mergers between humanity and the 'nature' of other things. The viral characters and mutant beings in *Cities*, and the technological hybrids and spliced life forms to be located in the remaining novels of the trilogy best demonstrate this desire to redefine utopia, and to escape the restraints of the 'natural' human condition. Hence, it can be argued that Burroughs' utopia does not centre upon the expansion of what constitutes a 'natural' human being, but borderline states that completely contravene the social, religious and scientific laws ordering our limited existence.

This model of utopian role reversal brings with it a new set of problems relating to subject position and the distribution of power. By conceiving a utopian community marked by the 'otherness' of American cultural margins, Burroughs understands that he has implicated his outlaw characters in the same processes of identification and difference fuelling the logic of containment. Ihab Hassan has stated in relation to this problem: 'Americans could no more exempt themselves from history than from power or desire. Their quests, therefore, reveal certain social attitudes, historical patterns, that we also need to ponder'.¹⁷ Burroughs' 'retroactive' utopian narratives strive to escape this historical supremacy, even though the utopian quest is ingrained with the same restrictive historical conditioning. The integrity of the American subject position is deliberately subverted as notions of historical fixity, character cohesiveness and humanity are replaced with continued instances of identity flux, and the splicing of human attributes with 'alien' characteristics and technologised enhancements. By refusing the hegemonic cultural and political conditions informing the utopian prototype, Burroughs is able to exceed the diversity Jameson describes as 'the flora and fauna of human nature'; thus aligning his fictional utopia with the 'plurality of available ontological orders' that Brian McHale considers to be central to the postmodernist condition of simultaneous worlds in collision¹⁸:

¹⁷ Hassan, *Selves at Risk*, 9.

¹⁸ Brian McHale, *Postmodernist Fiction*, (London: Methuen 1987), 37.

Our world and the other worlds mingle with increasing intimacy, hallucinations and fantasies become real, metaphors become literal, the fictional worlds of the mass media—the movies, comic books—thrust themselves into the midst of historical reality.¹⁹

Burroughs' interzone provides the fictional space, or historical 'non-space', for this type of interplay of potentiality where shared hallucinations and fantasies mingle with choice fragments of the American past; therefore enabling narrative counter-history. Yet there remains an aspect of ambivalence surrounding the Johnson Family's progressive project. Historical reality does indeed mingle with the shared fantasies of Burroughs' zones, creating alternative ontologies and counter-historical routines, and yet evolutionary impasse and the threat of extinction remain omnipresent in the technologies and science commandeered by his outlaw communities. As Timothy S. Murphy has explained, Burroughs works against the assumption that 'the history of Western representational thought and politics is the only possible form of history'; therefore he rejects 'all history as an inherently repressive force, as a kind of static or serial repetition'.²⁰ In a dialectical movement, Burroughs recognises history as the 'negation of freedom, so a revolution that simply negates history produces the affirmation of freedom, but only as a pure effect of the double negation'.²¹ From this somewhat paranoid position Burroughs also stated that, 'He who opposes force with counter-force alone forms that which he opposes and is formed by it. History shows that when a system of government is overthrown by force a system in many respects similar will take place'.²² Burroughs is using the narrative space as a means to address and explore 'problematical worlds' from a multiplicity of ontological positions.²³

These worlds raise some 'classic epistemological issues—appearance versus reality, multiplicity of perspectives, the distortion of desire and memory, and so on'.²⁴ For McHale, they also signify a form of anarchism: [...] 'the refusal either to accept or to reject any of a plurality of available ontological orders. This, I would maintain, is precisely the postmodernist condition: an anarchic landscape of worlds

¹⁹ Ibid., 45.

²⁰ Timothy S. Murphy, *Wising up the Marks: The Amodern Burroughs*, (Berkeley: University of California Press, 1997), 171.

²¹ Ibid., 171.

²² Burroughs and Odier, *The Job*, 101.

²³ McHale, *Postmodernist Fiction*, 43.

²⁴ Ibid., 43.

in the plural'.²⁵ I would argue, then, that the quest in *Place* is intentionally self-perpetuating because Burroughs wishes to emphasise not the capability of absolute realities, but the potentials to be located within multiple realities, undergoing continual processes of revision and development. By resisting the totality of the absolute, the text endeavours to escape the 'tyranny' of historical order by posing a number of counter-historical routines permanently undergoing processes of modification, contradiction and renewal. Not only narrative form and style, but the entire fictional universe must also undergo the same sort of evolution and internal reconstruction that Burroughs has prescribed for the 'Human Artifact'. Before we can evaluate the transcendental success of this potentiality further, we must first consider the dynamics of resistance presented through Kim's institutional infiltration.

As I have established, the Johnson Family network intends to infiltrate US power structures by means of covert operations to subvert these systems from within. Rather than present a unified political front to challenge the institution, Johnson operatives form splinter cells designed to corrupt corporate and political entities with minimal detection. The processes of observation and 'viral' control applied by society's regulating forces, the reality studio or the intelligence community, are mirrored by Kim and his affiliates, otherwise known as the 'Wild Fruits', in the 'civilian defense units' that make up operation 'Big Picture'. The Johnsons demonstrate their viral capability by forming 'splinter cells' possess the clandestine powers to infiltrate, contaminate and corrupt. The Johnson communities function in accordance with a communal subjectivity based around the exchange of consciousness and societal roles. Rather than adhere to fixed standards of identity and the constricting division of labour upholding the control machinery, the Johnsons apply a system of 'role rotation' intended to undermine hierarchies and initiate new relations of production:

the roles rotate. You can be *Fils de famille* today and busboy tomorrow—*son cosa de la vida*. Besides it's more interesting that way [...] This system of rotating parts operates on the basis of a complex lottery....Some people achieved a lottery-exempt status for a time but for most it was maybe a month, often less, before the got the dread call. Turn in your tycoon suit and report to casting. (P: 114)

This complex lottery ensures that 'an organization and a very effective organization can run without boss-man dog-eat-dog fear' (P: 115); hence it evokes and therefore

²⁵ Ibid., 37.

counteracts the language of the war game by basing its performative system of rotating parts on a parody of the call-up system used during the Vietnam War. Rather than being called to combat, the Johnsons working for operation 'Big Picture' are called to casting where they will be redeployed to infiltrate into and obstruct any number of reality studio control scenarios. This system of rotation is also reflected in the cyclical narrative structure of *Place*, with plot strands intersecting and narrative voices shifting and uniting in an egalitarian configuration. Kim's fantasmic community of radicals typically connotes those marginalised individuals instilled with society's horror of difference and 'otherness'. By their very nature as 'outlaw' characters infiltrating America's infrastructure the Johnson Family exude contagion, but this infectious quality is not only metaphorical. Although the viral characters central to the earlier fiction play a less significant role in *Place* and *The Western Lands*, certain aspects of Burroughs' viral theories are sustained through the characters' toxic potentials. Kim Carsons, described as a 'slimy morbid youth', (*P*: 23) embraces his pestilent nature because it inspires disgust in the conformist individuals he is exposed to:

He wallows in abominations, unspeakable rites, diseased demon lovers, loathsome secrets imparted in a thick slimy whisper, ancient ruined cities under a purple sky, the smell of unknown excrements, the musky sweet rotten reek of the terrible Red Fever, erogenous sores suppurating in the idiot giggling flesh. In short, Kim is everything a normal American boy is taught to *detest*. He is evil and slimy and *insidious*. Perhaps his vices could be forgiven him, but he was also given to the subversive practice of *thinking*. He was in fact incurably intelligent. (*P*: 23)

The 'abominations' and 'loathsome secrets' that Kim embraces appear to infer that he is connected with an ancient form of virulence, the 'Red Fever' that caused the ruination of the Red Night Cities in *Cities of the Red Night*. This 'insidious' contagion shapes and consumes his being, and the 'plague cloak' he wears acts as the main signifier binding him to the abject horror of viral infection: 'It is a beautiful garment of fine black camel wool lined with raw silk impregnated with suppurating lymph glands, tuberculosis and leprosy, the sweet rotten after-smell of gangrene and putrid blood, the sharp reek of carrion' (*P*: 296). He literally wallows in disease and viral decay, and yet remains immune to these grotesque assaults on the human condition; thus enabling him to return to the Red Night cities, the origin of the Red Fever, and the 'horror of our origins' (*P*: 257) meaning the Garden of Eden where Adam and Eve initiated humanity's parasitic reliance upon the word virus. Kim and

the Wild Fruits use their marginal status to maximum effect by realising the benefits to be garnered from an outlaw position. The contagion inscribed on Kim's body aligns him with corruption, potential catastrophe and, ultimately, death. In this sense, the Johnsons dissolve the boundaries between the realms of the living and the dead and moral binary definitions of good and evil, by occupying a space between these polar states.

The frontier setting in *Place* is by no means incidental. It mirrors this borderland existence and emphasises Kim's viral empowerment. Moreover, it is a plane on which to question and assess the boundaries separating the living and the dead, the real and the fictional, and, as Kendra Langeteig suggests, 'to disturb the culturally imposed *natural* equilibriums that legislate the body's sexual and social behaviour'.²⁶ The homosexual outlaws of the trilogy exist on the periphery of ordered civilisation due to this alignment with sexual corruption, viral replication and 'non-being'. However, this negative marginal existence actively empowers the Johnson Family to embrace the bodily corruption and toxicity inscribed upon them as a method of decadent resistance against cultural bias and encoded identity. In an act of reversal, Kim's gay male body flourishes on the pestilence imposed by social containment.

Thus, the 'Wild Fruits' build a strategic counter-assault around their condition as viral personifications immune to the symptoms 'written' on their bodies. The frontier provides the perfect arena for their exploits because it epitomises a space without clearly defined borders. Consequently, the Johnsons take possession of this historical space in a potential rewrite of mainstream American consciousness. The frontier becomes a mythical realm of utopian possibility for Kim and his comrades based on the appropriation of narratives of 'nationhood', personal autonomy and collective agency. Narratives of individualist 'frontier spirit' are replaced here with collectivist reconstitutions of Western history and cultural development. As Timothy S. Murphy has argued:

Burroughs recognizes, for the first time, the real indeterminism or contingency of Western history, and begins to hatch a plot that will interfere with its linear development. He recognizes that the smooth totality of repressive history, which he so long took for granted, has been produced from untotalizable fragments that can, in principle, be reclaimed, if only through fantasy [...] These chance fragments will be the accretion points for his new virtual communities.²⁷

²⁶ Langeteig, 'Horror Autotoxicus in the Red Night Trilogy', 156, (Langeteig's emphases).

²⁷ Murphy, *Wising Up the Marks*, 180.

Burroughs reclaimed 'chance historical fragments' denote a form of fictional anarchy, a refusal of the absolute in favour of a multiplicity of ontological orders and character identities. Murphy's historical observation draws us back to the fictional exploration of problematical worlds discussed previously, because these fragments allow Burroughs to reclaim, challenge and redirect the military-technological bases of the Cold War without committing them to the confining ideology of the control apparatus. As we shall see, this method is exemplified in Kim's appropriation of 'Big Science' research and testing.

Burroughs' Biotechnological Takeover

Just as the 'retroactive utopia' exemplified by the pirate community in *Cities* represented one historical 'accretion point', so does the borderless frontier in *Place* constitute a similar reconfiguration based on egalitarian cooperation and diversity. Kim's viral quality constitutes a reclamation of Western history because they reflect and 'interfere' with the Cold War application of biological warfare and human experimentation. A reversal of the types of radiological and drugs testing carried out by government agencies between the 1940s and late 1970s, and the corresponding fictional experiments funded by the 'Pickle Factory' in *Cities*, occurs in *Place* because scientific operations are applied by the outlaw community to overthrow the control apparatus. Not only are the characters using their virally encoded bodies to destabilise social boundaries, but they are also directing their own brand of biological warfare as a counter-offensive. As such, Burroughs revisits the same historical fragments providing the techno-scientific framework for *Cities*, but this time to demonstrate a conscious and measured fictional counter-assault:

Kim remembers his first adolescent experiment with biologic warfare. Smallpox was the instrument, the town of Jehovah across the river, his target. Their horrid church absolutely spoiled his sunsets, with its gilded spire sticking up like an unwanted erection, and Kim vowed he would see it levelled. It was dead easy. The townspeople were antivaccinationists [...] So Kim simply jogged the arm of destiny, you might say, by distributing free Bibles impregnated with smallpox virus to the townspeople of Jehovah. The survivors moved out. (P: 72)

Kim's adolescent biological experimentation is honed and developed into an arsenal designed to act as a 'selective pestilence' to wipe out undesirable agents of control, in this instance the corrupt representatives of the church of Jehovah who refuse

certain forms of bio-medical intervention. Kim simply targets the townspeople he sees as responsible for ancestral oppression and destroys them with small-scale germ warfare. This can be perceived as a form of biological terrorism directed against those sections of society deemed to be disadvantageous to Kim's future bodily escape plans. The deliberate distribution of Smallpox also reflects historical accounts of biological warfare dating as far back as the fourteenth century, when rotting human corpses were used deliberately to cause disease in enemy territories.²⁸ Just as refinements have been made in the application of biological weapons throughout the last century, specifically through genetic engineering methods that make possible warfare agents to attack the immune system or genetic characteristics, so has Kim's counter-offensive biological arsenal been upgraded to create a new era of biological warfare:

Yes Kim had considered smaller living weapons...so much more reliable but still in need of precise guidance. He assumes a professional manner, his eyes twinkling out through his bifocals. "Gentlemen, most illnesses kill indirectly and as it were accidentally by the uh cumulative damage of their occupation. So host-death is a by-product of the invading organism's life cycle." But wouldn't it be possible, Kim thought wistfully, to find an agent that will act *directly* on the Death Center, which some occultists locate in the back of the neck? A Death Organism – in short, a D.O. (P: 31)

Kim's 'living weapons' or 'Death Organisms' are bodily 'by-products' engineered for maximum performance in host destruction. This type of viral weapons engineering works as a reversal of Burroughs' previous treatment of biotechnologies in *Cities*. Rather than locate human potential in the cellular chaos resulting from control apparatus research and testing, both actual and fantastical, this bodily assault works to counter acts of state terror and covert testing. Kim achieves this reversal by directing biological weapons against their state origins. This Cold War historical 'accretion point' is revisited to counter the influence of modern biotechnologies on notions of 'defence' and 'offence'; thus inferring that *Place* progresses from incidental bodily liberation from state-developed viral pathogens, to a total assault derived from an appropriation of these methods. The most contemporaneous case of chemical and possible biological warfare came to light between 1983 and 1986 when the United Nations confirmed through a series of soil tests that Iraq had used nerve agents and mustard gas in conflict with Iran. By the end of the decade the United

²⁸ Thomas C. Wiegale, *Biotechnology and International Relations: The Political Dimensions* (Gainesville: University of Florida Press, 1991), 54.

States charged that Iraq had for some time been developing biological arms to cholera, anthrax and typhoid.²⁹ Interestingly, during the period 1981 to 1986, the US Department of Defense research budget for biotechnologies increased from five to forty million dollars with a large proportion of this funding going toward the US Army's modernisation and development of the Dugway Proving Ground in Utah, a containment facility for biological warfare research.³⁰ This level of expenditure, combined with government responses to external biological threats would have caused sections of the American populace to question the relationship between defensive and offensive activities.

Kim's 'Death Organism', or 'DO', is linked to Agent K9, the engineered viral life form first introduced in the 'Nova' Trilogy as a special agent for the Nova Police: 'We have a virus which we may term the RIGHT VIRUS already occupying the target. We have a disease agent K9 programmed to attack selectively any host occupied by R.V. Our agent K9 is further linked with D.O. the Death Organism' (P: 32). The 'D.O.' simply acts as a binary, or 'latent agent' (P: 31), waiting for a central signal to carry out an attack on the subject's 'death center' using bodily invasion and mind control. This viral operative could be directed into immediate action, or may have to wait a number of years in the field for decisive instructions. Either way, the use of a selective pestilence through viral field operatives safeguards the 'selector' from blanket contamination and unforeseen retaliation. Kim's deployment of these viral agents constitutes a disruption, reconstitution, and redeployment of the machinery of war. However, the novel also addresses the danger incited by using military metaphors to describe the expanding field of 'life sciences'. The transferral of combative classifications onto biotechnology, genetics and other related fields of recent scientific innovation perpetuates aggressive war game mindsets, and this can be seen in Kim's efforts to organise 'defense units' with military stealth and precision. In this case, though, the Johnsons redirect military aggression in a bid to destroy its hostile origins.

Edmund Russell has charted this metaphorical interchange in relation to the use of insecticides and chemical weapons during World War Two. He states that chemical warfare takes on the attributes of 'pest control', while insecticides are

²⁹ Judith Miller et al., *Germ: Biological Weapons and America's Secret War*, (New York: Simon & Schuster, 2001), 4.

³⁰ Wiegele, *Biotechnology and International Relations*, 151.

transformed into a military technology aligned with a state of total war.³¹ However, the growth and development of 'biotechnology' was more than just a product of metaphorical transfer, it actively shaped the nature of game opposition, defence expenditure and weapons system expansion. Cybernetic theory and the resulting biotechnical production can be traced back to the same epistemological moment considered in Russell's study, but biotechnologies were not assimilated by military practice in the same way as other branches of science. This is because global conflict and control provided the very means for their inception in the first place. The descriptions of biotechnological advancement provided by the US Office of Technology during the early 1980s demonstrate the extent to which this branch of life science was created by, and extended the fundamentals of deterrence:

The novel techniques used in biotechnology are extremely powerful because they allow a large amount of control over biological systems. Recombinant DNA technology, one of the new techniques, allows direct manipulation of the genetic material of individual cells. The ability to direct which genes are used by cells permits more control over the production of biological molecules than ever before. Recombinant DNA technology can be used in a wide range of industrial sectors to develop microorganisms that produce new products [...] This technology can also be used to develop organisms that themselves are useful [...] for example, such as those that might be employed in biological war.³²

Here, the DNA structures encoding the human organism become the basis for the mass production of weapons capable of destroying bodily organs from within, the same type of biological 'by product' Burroughs has already highlighted in relation to the 'host-death' resulting from viral contamination. The genetic material used to create these living weapons is fused with manufacturing technologies to create a synthesis of production line techniques and bodily processes. In this sense, the human form is incorporated on a genetic level so that it holds the potential to be harmful to itself. This evidence of bodily incorporation suggests the significant factors shaping the relationship between the human subject, history and science throughout the Cold War. First, that biotechnology was most certainly accelerated by global conflict, and second, that from the inception of the atomic age humans and technologies began to be classified using the same all-encompassing terminology of systematic control.

³¹ Edmund Russell, *War and Nature: Fighting Humans and Insects: From World War One to Silent Spring*, (Cambridge: Cambridge University Press, 2001), 14.

³² Committee on the Budget, United States Senate, *First Concurrent Resolution on the Budget: Fiscal Year 1985*, (US Library of Congress, 1984), 558.

Kim's paradoxical germ warfare correlates with an attempt to invalidate these kinds of military-funded 'Big Science' projects, and the inherent ideological aspiration to categorise all human life and social interactions. By infiltrating corporate, federal and military power structures, and by appropriating viral war game strategy, Kim attempts an attack upon the scientific practice of codification used to sustain Cold War uniformity and alienation. The 'undead' virus is used here by the counter-culture to halt the production of docile bodies and imposed binarism. Therefore, viral infection becomes the basis for opposition and escape, and not the transmitter of depersonalisation and control contained in state sanctioned 'Big Science'. In the earlier fiction, the body was invaded to such an extent that the boundaries between 'inside' and 'outside', self and other were undermined completely, and liberation occurred via a process of involuntary bodily release. The Johnsons are not only immune to this degradation because they embody the combative qualities of the retrovirus, but also because they harness the fusion of technology and living tissue establishing the conditions for post-human potentiality. Before we consider Burroughs' biotechnological appropriation further, we must first consider the advances in systems theory and communications sciences informing this corporeal integration.

Cybernetics: The Military-Technological Body

During the last sixty years, life sciences have become inextricably fused with systems theory and its classifications. Cold War research has managed to 'debiologise' the human organism by encouraging life scientists to reject thinking of the body as a holistic unit in favour of viewing it as a complex technological communications system. As Donna Haraway has recognised in 'A Cyborg Manifesto' (1991), communications sciences and modern biologies are united by a common element, 'the translation of the world into a problem of coding'.³³ This can be related to cybernetic system theories that inform the likes of communications, computer design and weapons development, all of which are subject to regulating feedback loops. This biotechnological merger displays the mark of ideological manipulation because it conveys a mission to regulate heterogeneity into a system of

³³ Donna Haraway, 'A Cyborg Manifesto' in *Simians, Cyborgs and Women: The Reinvention of Nature*, (London: Free Association Books, 1991), 164.

equivalences. As Haraway suggests, the individual and collective 'body' becomes integrated within this circuit of technological power and capital through genetic inscription and classification:

In modern biologies, the translation of the world into a problem in coding can be illustrated by molecular genetics, ecology, sociobiology, evolutionary theory, and immunobiology. The organism has been translated into problems of genetic coding and read-out. Biotechnology, a writing technology, informs research broadly [...] Biology here is a kind of cryptography.³⁴

If knowledge of the body is based around a system of 'cryptography', then questions begin to arise about levels of human agency, a concern which has obviously fuelled Burroughs' writing since the formulation of the word virus as a parasitic pandemic enslaving the subject to the language of control. Haraway's corporeal inscription displays similar anxieties about the loss of subjecthood and bodily crisis, by outlining the probable incorporation of the human organism within technological feedback circuits that alter consciousness and social relations irreversibly. The mapping of DNA, or deoxyribonucleic acid structures into binary code, for Burroughs, would suggest the ultimate triumph of the word virus and its associated control mechanisms because every living organism is reduced to strands of molecules. These strands of molecules are then translated into computer code that attempts to define and classify the state of the human organism throughout the history of the planet. The discovery of DNA structure in 1952, and the subsequent development of the human genome project during the 1980s show the correlation between new science and the military-industrial complex directing knowledge acquisition. Not only is the development of genetics indebted directly to the eminence of information theory, mapping technologies and system-based sciences such as cybernetics post World War II, it is also linked to the concerns of the socio-historical climate which during this thirty year period, as we know, centred on heightened periods of Cold War paranoia. It is not surprising, then, that this new science should strive to record and 'contain' human development within writing technologies that categorise subject types and identify 'alien', or corrupting structures within the confines of the body.

This system of categorisation can be traced back to the end of World War Two, when metaphorical connections between computers and the human mind were formulated in relation to models of strategic warfare and the deployment of upgraded

³⁴ Ibid., 164.

weapons technologies. For the first time, humans were being described using the same language and classifications as applied to machines. This is because the scientists working in the fields of physics, biology and engineering at the end of the war and during the formative years of the Cold War, conceived a feedback loop linking the human mind and the developing technologies as part of one inclusive information system. In 1943, John Von Neumann and Norbert Wiener, along with other eminent scientists, established this new interdisciplinary mode of study focusing on the evolving nature of information systems. Wiener would eventually name this new collaborative area of study 'cybernetics', a word derived from the Greek, 'kybernetes', meaning 'steersman'. Cybernetics would become a separate branch of science concentrating on the controlling forces directing all types of information systems, from neurological impulses to the application of missile guidance systems (cybernetic servo-mechanisms) in technologised warfare. In 1948 Wiener's book, *Cybernetics, or Control and Communication in the Animal and Machine* circulated the philosophy of the 'thinking machine' to a receptive general public, so receptive that the book sold over twenty-one thousand copies taking four separate printings. The ideas embodied in this work, his 1950 study *The Human Use of Human Beings*, and John Von Neumann's analyses *Theory of Games and Economic Behaviour* (1953) and *The Computer and the Brain* (1958) would provide the basis for theories of governance and control within all information systems and game strategy, including the emergence of computer models to shape and direct government policy.

Wiener and Von Neumann's models worked to eradicate uncertainty from scientific endeavour by linking all variables into this inclusive feedback loop. As a result, reactions could be pre-empted and disorganisation eradicated because of the holistic and unifying principles informing this new philosophy of science. As the following passage demonstrates, Wiener, like Burroughs, recognised the systematic similarities between mechanised objects and living organisms as they become integrated into a scheme of production. Just as the human body is subject to a life cycle whereby death becomes a 'by product', so is the machine subject to a 'zone of organisation' within which there is a predisposition to 'run down':

The machine, like the living organism is [...] a device which locally and temporally seems to resist the general tendency for the increase of entropy. By its ability to make decisions, it can produce around it a local zone of organization in a world whose general tendency is to run down. The scientist is always

working to discover the order and organization, and is thus playing a game against the arch-enemy, disorganization. Is this devil Manichaeian or Augustinian? Is it a contrary force opposed to order or is it the very absence of order itself? [...] The Manichaeian devil is playing a game of poker against us and will resort to bluffing; which as Von Neumann explains in his *Theory of Games*, is intended not merely to enable us to win on a bluff, but to prevent the other side from winning on the basis of a certainty that we will not bluff. Compared to this Manichaeian being of refined malice, the Augustinian devil is stupid. He plays a difficult game, but he may be defeated by our intelligence as thoroughly as by a sprinkle of holy water.³⁵

Wiener saw cybernetic systems theory as the ultimate answer to the 'unholy' threat of uncertainty. The religious fervour with which he explains his theory of information is not merely metaphorical dressing for theatrical impact, but a reference to the ultimate quest for truth, logic and reason. The Augustinian idea of evil is characterised by incompleteness and chaos, 'the very absence of order itself', a state that Wiener believes may be overcome by learning, logic and mathematical calculation, but the 'Manichaeian devil', a form of evil based on a permanent war of binary opposites, is a trickster who will resort to games based on this black and white dualism in order to deny the quantification of meaning and sense. By relating this quest for a logical information model to theories of entropy in a closed heat system, Wiener shows that the randomness and uncertainty of states he aligns with a 'general tendency to run down' can be managed through a formula of positive and negative feedback that also accounts for human interaction. By classifying positive and negative feedback in communications systems of both mechanical and organic origins, Wiener reduces the Manichaeian devil to a more manageable Augustinian form of evil by quantifying and confining the levels of disorder threatening the system. This means for classifying information is central to understanding how humans have become incorporated into Cold War game logic and military technologies, as Wiener and Von Neumann's work provided the first comparisons of the human nervous system with error-controlled computer programming.

It is not surprising, then, that the technological metaphors and actual production systems linking science, warfare and the human organism escalated at this point because Wiener and Von Neumann's work directly contributed to the development of game theory to serve the Cold war impasse, a relationship which Burroughs was aware of when formulating the philosophy of the cut-up:

³⁵ Norbert Wiener, *The Human Use of Human Beings: Cybernetics and Society*, (New York: Hearst Corporation, 1950), 49-50.

Dr Neumann in his theory of Games and Economic Behaviour introduces the cut-up method of random action into game and military strategy: assume that the worst has happened and act accordingly. If your strategy is at some point determined [...] by random factor your opponent will gain no advantage from knowing your strategy since he cannot predict the move. The cut-up method could be used to advantage in processing scientific data. How many discoveries have been made by accident? We cannot produce accidents to order.³⁶

These observations on the random element directing military strategy highlight Burroughs' absorption of systems theory into the chance configurations of the cut-up. However, Burroughs' suggestion that the cut-up be applied to scientific processing negates this military precision by introducing anarchic production techniques to scientific method. Contrary to Burroughs' artistic appropriation of systems theory, Von Neumann's work directly impacted on the development and application of armaments as well as providing a probability model for military strategy. In 1943, Von Neumann was called to Los Alamos to work on methods for containing and directing nuclear energy. In relation to this research, David Porush has noted that: 'his success made it directly possible to create the atom bombs dropped on Hiroshima and Nagasaki.'³⁷ This chain of events demonstrates quite clearly how cybernetics research was a driving force behind increased nuclear capability; an observation that gives credence to Porush's viewpoint that 'the bomb was a cyborg' as it exemplifies the merger between human cognition, early computer modelling and military technology.

Cybernetic theory made the sterile threat of pre-emptive game warfare possible by initiating servo-mechanisms for the guidance and delivery of missiles, not to mention the development of surveillance systems for tracking anti-aircraft artillery. The cybernetic computers contained within these weapons systems actively responded to the demands of the environment, thus causing scientists to recognise this as a huge leap toward an integrated 'thinking machine'. Wiener's contribution to the creation of such systems for delivering warheads from remote locations was noteworthy, primarily because his predictive models displaced voluntary control behaviour in human operations. In spite of his direct influence upon military strategy and hardware, Wiener had serious misgiving about the construction of nuclear weapons, the ramifications of cloning and genetic manipulation, and the possible

³⁶ William S. Burroughs and Brion Gysin, *The Third Mind*, (New York: Viking Press, 1978), 32.

³⁷ David Porush, 'The Rise of Cyborg Culture, or the Bomb Was a Cyborg', *Surfaces*: 4, 1996, accessed via <http://www.pum.umontreal.ca/revues/surfaces/vol4/porush.html>.

consequences of collaborations between scientific institutions and military funding. These reservations would eventually induce Wiener to retreat from government service. So why, then, did this MIT mathematician dedicate his life's work to the production of knowledge systems that could be applied to military command-control scenarios? Stephen Pfohl provides a possible explanation by highlighting Wiener's desire to banish 'other possible worlds for the purpose of provisionally fixing, stabilising, and communicatively controlling the boundaries which stake out the 'contingent world' of which cybernetics is [...] a part'.³⁸ According to Pfohl, Wiener envisaged cybernetics as a vehicle for communicative exchange between 'heterogeneous beings; energetically scanning, monitoring, reading, interpreting, and resisting, yielding, penetrating, and/or blurring the boundaries between themselves and others'.³⁹ It is therefore paradoxical that Wiener's cybernetics work would contribute so immensely to a Cold War system dedicated to homogeneous control, identity containment and the preclusion of random behaviours. There is an obvious contradiction in Wiener's vision of communicative exchange because his quest for rationalisation and order banishes the variables enabling multiple 'possible worlds' and identity flux, and yet his personal philosophy seemed to embrace the freedoms offered by this kind of ambiguity. It is significant that Burroughs chose to integrate his own possible worlds using a fusion of scientific enquiry and artistic anarchy. In this sense, his Red Night trilogy challenges the fixity of cybernetic theory in order to restore the emancipatory promise originally contained in Wiener's visions of diverse, and yet structured communication flows. Therefore, we must turn our attention to this fusion of scientific and fictional potentials in *Place*.

Johnson Family Genetics

Cold War cybernetics blurred the boundaries between animal and machine because the computer began to take on some of the cognitive processes previously only attributed to human capability. Burroughs addresses this haziness with a curious mixture of resistance and optimism. Although the biological rewrites attempt to resist the ideological forces charging the cryptographic regulation of the body, Burroughs'

³⁸ Stephen Pfohl, *The Cybernetic Delirium of Norbert Wiener*, article 44, (1997), *CTheory*, eds Arthur and Marilouise Kroker, accessed via www.ctheory.net/articles.aspx?id=86.

³⁹ *Ibid.*

interest in scientific methodologies reveals his drive to create a hybrid of fictional possibility and scientific advancement that reinstates heterogeneous exchange:

In the first place, I think there's going to be more and more merging of art and science. Scientists are already studying the creative process, and I think the whole line between art and science will break down and that scientists, I hope, will become more creative and writers more scientific⁴⁰

This merger, according to Burroughs' utopian vision, would initiate new artistic and scientific enterprises which in turn facilitate bodily modifications, a notion he contemplated as far back as 1970 when he stated that 'Even on a scientific level we're very near to being able to make all sorts of alterations in the human body. They are now able to replace the parts like an old car when it runs down'.⁴¹ Burroughs realised that the massive leaps of progress made in the fields of biotechnology, genetics and weapons development had somewhat closed the gap between 'science fiction' and 'science fact'; therefore many of the episodes in his writing 'that were purely fanciful at the time, are now quite within the range of possibility'.⁴² By likening the body to a run down 'old car' that can be restored with manufactured components, Burroughs accepts that the organism and the machine are not only described using the same language; but maintained with the same methodology.

In spite of his misgivings about the 'vested interests' shaping scientific and technological output, Burroughs recognises the utopian potential to be acquired from a merger between artistic imagination and scientific enquiry. The promise he attributes to this collision of biotechnology and narrative nonconformity detaches cybernetic codification from the reductionist logic undermining Wiener's original vision. Furthermore, it works to complicate the assumption that 'thinking machines' are more reliable and accurate than human agents in decision making processes and games. This is achieved by fusing the human mind to the technological object in such a way that humanity is not superseded, but perhaps strengthened by the merger. In this sense, Burroughs' perspective counters the application of systems theory in the policy judgement and warfare modelling pioneered by RAND, the US government 'think tank' from the early 1950s. Scientists at RAND were responsible for one of

⁴⁰ Burroughs and Gysin, *The Third Mind*, 7.

⁴¹ Burroughs and Odier, *The Job*, 107.

⁴² *Ibid.*, 107.

the most detrimental aspects of game theory, the introduction of simulated warfare and computer modelling in nuclear deterrence and crisis management. In this climate, RAND committee member Herman Kahn (a colleague of Von Neumann) would propose a 'Doomsday Machine', a powerful computer designed to pre-empt a Soviet attack with instant nuclear destruction. Although Kahn's alarming proposal would not come to fruition, his research would influence the strategic view that weapons stockpiling could lead to victory. The RAND think tank also intended to create a computer model of the enemy, thereby introducing a 'paranoid bias' into the 'modelling of an enemy's psyche.'⁴³ In this sense, human thought processes, reasoning and complex political relationships are reduced to issues of programming that displace human cognition with simulations.

As I shall demonstrate, the cybernetic mapping of the body through genetic code becomes a central feature of the Johnson Family resistance, and this causes ontological blurring between human and control machine. The cryptographic mapping of the body into a cybernetic feedback loop enables the Johnsons to 'hack' into and infect controlling systems while remaining undetected, as well as providing a blueprint for replicating such resistance in future generations. Thus, the simulations and programming propagating the war machine are re-modelled through fiction to become a vehicle for infinite Johnson reproduction. Although this methodology means being assimilated into the very systems they wish to destroy, Kim attempts to undermine the control principle by corrupting and re-writing it from within. What Burroughs is proposing in *Place*, then, is recognition of the inevitable integration taking place between neurological impulses, bodily actions and technological processes. He recognises potential benefits to be acquired from such a fusion; therefore implying that the scientific methods employed by his characters are successful applications of scientific counter-potentials to reconfigure the machinery of control.

In his work on biopolitics in the 'killer virus novel', Stephen Dougherty raises a convincing argument about the lack of ontological distinction between the human gene and the aforementioned computer software programme mapping the structure of the living organism:

⁴³ Andrew Glikman, 'CYB+ORG = (Cold) War Machine', *Trace Archive*, Nottingham Trent University Trace Online Writing Centre, accessed via <http://trace.ntu.ac.uk/frame2/articles/borg/wiener.html>

What is immediately striking about these definitions is how they refuse any ontological distinction between the gene and the software program. Given the terms provided, it is nearly impossible to distinguish between a human virus and a computer virus: both species of virus are codes that integrate themselves into previously existing complex-coded structures, and then begin replicating themselves by rewriting to their own specifications. Indeed, such definitions promote a blurring between the human virus and the computer virus that inevitably rebounds on our sense of the ontological difference between humans and computers themselves.⁴⁴

Dougherty is writing about the upsurge of virus narratives during the 1990s, but his analyses are comparable with the manifestations of bodily inscription and replication embedded within Burroughs' fiction a decade earlier. Both highlight the power of simulation in coded systems, a power that leads Dougherty to question the fate of humanity in the information age. The 'complex-coded' systems he speaks of, threaten the integrity of the body like a virus by rewriting and, ultimately, commandeering the coded subject. Those biotechnologies that may potentially sustain human life through DNA alterations and prosthetic enhancements also signify fear of annihilation from the same source. The abovementioned lack of epistemological distance between living tissue and computer code, and the subsequent configuration of the virus as pure information solely dedicated to making copies of itself leads Burroughs to rethink the position of the body and subjecthood during the course of the 'Red Night Trilogy'. The emphasis shifts from external viral attacks on the body in *Cities*, to altered bodily states caused by a merger between DNA, viral code and technological augmentation in the remainder of the trilogy.

As far as Burroughs is concerned, this amalgamation enables a kind of hybrid potentiality that distances the subject from the trappings of 'humanity'; thus deflecting some of the bio-technological assaults directed at the body and independent subjecthood. Dougherty notes exactly this type of shift in subsequent virus narratives by stating that 'the infectious scenario is one wherein the body is besieged by a glut of information that threatens not only to overwhelm the immune system, but at the same time to transform the nature of what it means to be human'.⁴⁵ For Dougherty, the 'natural' body is strengthened and modified, but in the same instance it internalises the latent bio-risk stemming from Cold War instigated information flows. However, for Burroughs, this incorporation into the feedback system initiates a potential utopian existence based around hybrid, extraterrestrial,

⁴⁴ Stephen Dougherty, 'The Biopolitics of the Killer Virus Novel', *Cultural Critique*, 48.1, (2001), 9.

⁴⁵ *Ibid.* 9.

and cybernetic life forms. Rather than fighting for the maintenance of a unified 'human nature', the characters in *Place* maximise upon the developments resulting from a burgeoning technocracy. This absorption into the control network allows Burroughs' characters not only to challenge and reconstruct the control apparatus for their own recalcitrant purposes, while equipping them with an auto-immunity from biotechnological assault.

In recent years, the results of this shift have been noticeable in the development of the posthuman, increased interest in technologically based counter-cultures such as cyberpunk, and the expansion of cultural theories that recognise the merger between technology and tissue. Some of these cultural phenomena suggest potential benefits attached to this biotechnological existence, but all identify the ideological motivations for networking and classifying the body in this way. As we have already established, in *Place*, Burroughs' response to this technocracy is to attempt a rewrite of the scientific enterprises sustaining and expanding the feedback loop assimilating human and machine. Burroughs situates counter-potentials in the simulations resulting from this cybernetic modelling and genetic ciphering. He actively embraces a collision between biotechnological and fictional realms, a fusion enabled because cybernetics creates a point at which the artificial, or coded simulation, and the natural fold into one another and become uncharted possibility. This is the creative basis for Burroughs later fiction, an inversion of Cold War modelling, where the simulation no longer relates to the cryptographic control of the subject, but to the unmapped territory of the artistic imaginary where boundaries collapse and infinite identities are facilitated. We learn that Kim Carsons does not possess a singular subjecthood within the frame of the narrative because he has been cloned from the 'Founder', the original Kim who was gunned down by a mysterious shootist at the beginning of the novel:

Cloning was in an experimental stage at the time of the Big Jump, when the fifty original Wild Fruits committed suicide at Fort Johnson. We had actual biologic cuttings stored in refrigerated vaults. Pending the solution of residual technical problems, we set out to match voice and genital patterns with existing replicas [...] Then the subject is slowly led to remember the former life of his guest and the two beings merge into one. Kim Carsons, age twenty, was one of ten clones derived from Kim Carsons the Founder. Since he was in contact with approximate replicas of himself and with other clone families [...] he was under no pressure to maintain the perimeters of a defensive ego and this left him free to *think*. (P: 105)

The 'biologic cuttings' taken from the original Wild Fruits demonstrate Burroughs' promotion of a fusion between narrative multiplicity and scientific discovery. The Wild Fruits' are 'cut-up' and spliced with replica subjects so that the two beings merge and the 'defensive ego' is replaced with a shifting subjectivity. As I have previously suggested, this textual undertaking to intersect and splice character identities and narrative voices is indicative of an overall shifting egalitarian subjectivity. Hence, the unfettered heterogeneous interplay of the textual and tape recording cut-ups is also applied to the realm genetic engineering. Each Johnson clone appears to partake in collective memories and a shared consciousness that unites their reasoning and reactions. In a defiant rewrite of genetic codification, the Johnsons realise the benefits to be garnered from their own brand of genetic engineering. Instead of upholding a coded uniformity through DNA analyses, Kim views cloning as a vehicle for the collective human artefact to achieve its destiny in space. The Wild Fruits are now infinitely reproducible because these clones, or copies, are able to mimic the replicative capability of the virus. This allows them to exist in the same borderless state between life and death and take on 'undead' viral qualities that permit a degree of natural immunity against the planet's plagued system. Moreover, by partaking in unorthodox genetic engineering, the Johnsons intend to effect changes in the human body for the transition into space. This collective existence conveys what Timothy Murphy sees as an 'antihierarchical theme' because the ten clones derived from the original Kim work within a system of egalitarianism based on a communal consciousness⁴⁶:

To say Kim Carsons still lives is to pose the question: what does this mean? His thought patterns live in a number of different brains and nervous systems, his speech and genital patterns, all of which are distinctive [...] The clones exist in a communal mind in which the bodies are at the disposal of all others, like rotating quarters. (P: 105)

Kim's manifestation as a collective mind moving from body to body, further highlights how *Place* strives for an existence beyond the confines of humanity's 'arrested evolution'. The physical body becomes an interchangeable vessel for the collective conscious of the Johnson community, a development that sets the stage for a potential 'non-body' route into space. Kim Carsons also constitutes a form of textual afterlife, perpetuated by the unfettered possibility of continuous narrative

⁴⁶ Murphy, *Wising up the Marks*, 188.

becoming. Murphy believes this is Burroughs' attempt to 'recast his narrative in communal terms' as an alternative to the individualistic focus of the 'generic western'.⁴⁷ The only means for forming a collective revolutionary subject, according to Murphy's interpretation, is via the 'schizophrenic splitting of the subject,' a practice which not only aims to challenge American individualism, but also, as I have suggested, attempts to challenge the encrypted human body as end-product of Cold War research.⁴⁸ The counter-culture as embodied within the Carsons clones is now in a unique position to sustain its resistance through this process of replication; thus redirecting Cold War research toward human development and revolt. However, as biological copies, the various Kim clones are set to replay the aforementioned shootout sequence at various stages during the narrative, the scene that leads to their repeated demise throughout space and time:

Kim is heading north of Boulder. Should make it in five, six days hard riding. He doesn't have much time left. September 17, 1889, is the deadline, only ten days away [...] He knows Mike Chase will have a plan that won't involve a straight shoot-out. Mike is faster, but he doesn't take chances. Kim will use his .44 special double-action. Of course it isn't as fast as Mike's 455 Webley, but this contest won't be decided by a barrage. First two shots will tell the story and end it. (P: 267)

Kim's past infects the present and potential future because the biological copy or cloned subject is encoded to replay the scene at Boulder ad infinitum. This pre-ordained repetition would suggest that by reproducing the Johnson family members with experimental procedures harnessing the programmed data of DNA analysis, the clones submit themselves to the ultimate form of militarised cryptographic control.

Donna Haraway suggests in 'A Cyborg Manifesto' that: 'communications sciences and biology are constructions of natural technical objects of knowledge in which the difference between machine and organism is thoroughly blurred'.⁴⁹ Subsequently, this breakdown of defining boundaries initiates 'high-tech' imaginations that simultaneously contemplate nuclear destruction and science fiction escape. However, Kim and the Johnson clones are able to create a counter-space to this militarised imagination by submerging themselves within the system and then rewriting it from within. These characters may be set to revisit scenes from the past indefinitely, but each replay of the shootout sequence is configured differently,

⁴⁷ Ibid., 188.

⁴⁸ Ibid., 189.

⁴⁹ Haraway, *A Cyborg Manifesto*, 167.

indicating the infinite alternatives facilitated by these potential narrative zones. The death cycle prevails, and the characters remain assimilated into the control systems they attempt to destroy from within, but this cyclical return functions as the primary counter-assault in the Johnson's repertoire. A state of utopian transcendentalism has not been achieved by the close of the novel, and the Johnson Family attempts for a non-body route into space remain incomplete. However, Kim's biotechnological research activities have initiated textual and biological counter-conditions for the appropriation of Cold War Big Science endeavour, and post-human configurations of cloned collective subjectivity. These are regions and modes of being that nonetheless activate new freedoms. I am suggesting, then, that the quest framework in *Place* is subject to narrative deferral because the cyclical existence is in itself a form of resistance and escape based on limitless reconstitutions of the past. Burroughs has placed in motion a set of complementary textual and scientific potentialities that may serve as the basis for a new state of being in the final, and most spiritual, novel of the Red Night trilogy, *The Western Lands*.

The Western Lands: A Hybrid Text

The Western Lands (1987), continues the corresponding quest into transcendental space that was commenced during *The Place of Dead Roads*, this time, via the exploration of various Egyptian, Tibetan and Mayan afterlife mythologies that are seen to shape and dictate the preconditions of human existence. The narrative begins by introducing the writer William Seward Hall, Burroughs' 'pen name', and another manifestation of the Kim Carsons character that was killed at the outset of *Place*. The developmental restraints confining Kim and his cloned associates to a death cycle in the previous novel are still present here, and seem to affect Hall, the 'master script-writer' as he struggles to overcome a crippling writer's block:

After the first novel he started on a second, but he never finished it. Gradually, as he wrote, a disgust for his words accumulated until it choked him and he could no longer bear to look at his words on a piece of paper. It was like arsenic or lead, which slowly builds up in the body until a certain point is reached⁵⁰

⁵⁰ William S. Burroughs, *The Western Lands*, (London:Picador, 1987), 1, hereafter cited as *WL*.

Hall is experiencing this aversion and 'disgust' for the written word because he is caught within the aforementioned Egyptian, Tibetan and Mayan mythological structures that dictate the subject's transition into the afterlife. We learn that Hall is trapped within a purgatorial state between the world of the living and the realm of the dead, and in a vain attempt to escape the confines imposed by this indeterminate state, he must write a transcendental escape route into the highly revered and discriminatory afterlife. This 'undead' state proved useful for the Johnson Family counter-assault because it provided them with a level of immunity against the planet's pestilence; however Hall wishes to bypass this resistance in order to attain the next developmental stage. Unfortunately, his disgust for the written word, and his elemental assumption that language conveys and propagates the control mechanisms limiting human agency, severely curtail success in this enterprise, and so doom the script-writer to a narrative dead-end, developmental inertia and confinement to a spiritual limbo:

The old novelists like Scott were always writing their way out of debt ... laudable ... a valuable attribute for a writer is tenacity. So William Seward Hall sets out to write his way out of death. Death, he reflects, is equivalent to a declaration of spiritual bankruptcy. One must be careful to avoid the crime of concealing assets ... a precise inventory will often show that the assets are considerable and that bankruptcy is not justified. A writer must be very punctilious and scrupulous about his debts. (WL: 3)

The novelist faces 'spiritual bankruptcy' and therefore must attempt to engineer a textual escape out of debt/death. Writing is the only means left to create such an escape route, a portal into another realm of existence beyond the rigid direction and control of the afterlife. It is therefore understandable that *The Western Lands* sets out to extend the Book of the Dead format first introduced in *Place*. This time it includes a great detail about the various stages and challenges the human soul must go through in order to achieve a successful transition into the afterlife, a schemata inspired by Norman Mailer's mythopoetic novel *Ancient Evenings* (1983) set in Egypt during the nineteenth and twentieth dynasties. Mailer's novel details rites of passage on the way to the afterlife, and traces the journey of the soul through the stages of reincarnation leading to the final spiritual judgement, elements that inform Burroughs outline of the ephemeral stages between physical death and the transcendence of the soul:

The ancient Egyptians postulated seven souls.

Top soul, and the first to leave at the moment of death, is Ren, the Secret Name. This corresponds to my Director. He directs the film of your life from conception to death. The Secret Name is the title of *your* film. When you die, that's where Ren came in.

Second soul, and second one off the sinking ship, is Sekem: Energy, Power, Light. The Director gives the orders, Sekhem presses the right buttons. (WL: 4)

Burroughs outlines five other transitory 'souls' on the journey to the afterlife, or 'western lands', each one taking on the control attributes of the Reality Studio. Once again, Burroughs returns to the concept of control as an omnipotent film studio 'directing' the 'film of your life' from the moment of birth to the point of death. Even the seven souls proposed here are not immune from the control scenarios played out under the supervision of the Master film, and, as this hierarchy denotes, there are many echelons of immortality to which the soul is subject: 'The Ren and Sekhem are relatively immortal, but still subject to injury. The other souls who survive death are much more precariously situated' (WL: 7). As this association with previous control conspiracies emphasises, access to the western lands is severely restricted, and therefore only a select group complete the transcendental voyage into the next world:

The road to the Western Lands is by definition the most dangerous road in the world, for it is a journey beyond Death, beyond the basic God standard of Fear and Danger. It is the most heavily guarded road in the world, for it gives access to the gift that supersedes all other gifts: Immortality. Every man starts the course. One in a million finishes [...] The Egyptians and Tibetans made this journey after Death, and their Books of the Dead set forth very precise instructions—as precise as they are arbitrary. (WL: 126)

The journey toward immortality is rife with unknown perils, dangers beyond the binary standards of good and evil set out in the bible. Even the instructions set out in the ancient religious scripts of the Egyptians and Tibetans fail sufficiently convey the magnitude of the quest. This is because these 'arbitrary' and yet 'precise' written instructions are subjective receptacles for the control principles of the given historical moment. Therefore, Hall's central mission is to find a successful means to counter the restrictions placed upon the human subject from entering the realm of the immortal, and challenge the existing power monopoly. The customary merging of character and quest practised in the previous novels of the trilogy is again used with frequency in *The Western Lands*, this time not via a process of experimental identity transfer or repeated acts of cloning, but through an undefined splicing of

consciousness that fuses the destinies of Hall the script-writer with 'Kim Lee', leader of the underground intelligence movement Margaras Unlimited during Chapter One, and Kim Lee with the Egyptian scribe, 'Neferti', during Chapter Three. The quest for immortality and uninhibited access to the afterlife is passed from one identity/embodiment to the next, and culminates in Neferti's mission to locate and steal the maps of the Western Lands in an effort to undermine and destroy the 'fear death monopoly' of the gods: 'Neferti intended to obtain the secret Western Land papyrus. Scribes at his level were not supposed to know even that such a papyrus existed. He carried at all times an alabaster tube of poison, in case of arrest, and a thin dagger with a grooved tip dipped in cobra venom.' (*WL*: 101). By locating these plans, Neferti would potentially be in a position to trigger a rewrite operation to enable both the human evolutionary project, and the pursuit of transcendental immortality:

Look at their Western Lands. What do they look like? The houses and gardens of a rich man. Is this all the Gods can offer? Well, I say then it is time for new Gods who do not offer such paltry bribes. It is dangerous to live, my friend, and few survive it. And one does not survive by shunning danger, when we have a universe to win and absolutely nothing to lose. It is already lost [...] We can make our own Western Lands. (*WL*: 164)

The search for the Western Lands blueprints demonstrates Neferti's rejection of the Gods' limited afterlife monopoly in favour of an alternative space formulated independently from the control agenda. Whereas the Gods offer 'paltry bribes' to those that gain access to the afterlife, Neferti's mission aims to facilitate a true utopian transcendentalism that exposes the Gods' deficiencies in contrast with the limitless possibilities of a self-fashioned utopia. Neferti's rewrite plans for the Western Lands blueprints would, in theory, initiate the same potentialities offered by Burroughs' fictional possible worlds. However, this self-fashioning did not begin with the journey of the soul through the uncharted domains of the dead, rather it commenced with the processes of bodily enhancement enabled by organ transplantation and the incorporation of the physical body into systems of production. These techniques of self-fashioning were first implemented in *Place* by Kim and the Wild Fruits through processes of cloning and replication. In this sense, Kim was able to create a limitless Johnson Family life cycle where the collective subjectivity was transplanted from one physical body to another. However, as far as

Neferti is concerned, this system is tragically flawed because biological transplant procedures impede bodily transcendence by making the subject dependent on the functions of the physical body, and the limitations of the birth-death cycle:

It may be said that any immortality blueprint depending on prolonging the physical body, patching it together, replacing a part here and there like an old car, is the worst plan possible, like betting on the favorites and doubling up when you lose. Instead of separating yourself from the body, making yourself more and more dependent on the body with every stolen breath through transplanted lungs, with every ejaculation of a young phallus, with every excretion from youthful intestines. (WL: 151)

Here, Burroughs repeats his comparison of the body with the mechanical components of an 'old car' that can be replaced in order to restore optimal performance, a concept he first suggested in the aforementioned interview with Daniel Odier in 1978.⁵¹ In *The Western Lands*, though, the extension of physical life through processes of genetic modification and organ replacement are considered to be of limited success in human evolution because they make the subject even more dependent on the confines of the body. Neferti recognises that in order to gain transcendental success he must shed the limitations of a physical existence and embrace 'non-body' immortality. The body may be maintained and successfully modified through cloning, organ replacement and identity transfer, but this does not aid the subject to transcend the limits of physical being.

Despite this, Kim Lee continues to explore the potentials to be acquired from biological blueprints and genetic experimentation in league with the 'secret service without a country' (WL: 24), Margaras Unlimited, because he is well aware of the dissident qualities to be attributed to the biological rewrite. Kim is a key member of this 'supernatural police force' (WL: 26), and he undertakes research and surveillance operations to support the organisation's central mission of obtaining an escape-route into space:

Our policy is SPACE. Anything that favors or enhances space programs, space exploration, simulation of space conditions, exploration of inner space, expanding awareness, we will support. Anything going in the other direction we will extirpate. (WL: 26)

This quest to explore the frontiers of inner and outer 'space' via a comprehensive scheme of experimentation incorporates concepts of the astral, ethereal and material

⁵¹ Burroughs and Odier, *The Job*, 107.

in Burroughs' last manifestation of an all-embracing counter-existence. It is no coincidence that Burroughs chooses this point in the narrative to reveal the identity of the mystery 'shootist' at the beginning of *Place*, because this so far unidentified figure will become the focus of a parallel transcendental quest plot. We learn that this new character 'Joe the Dead' was responsible for the deaths of Kim Carsons and Mike Chase at the outset of the previous novel: 'With quick precise movements he disassembled the telescoping rifle and silencer and fitted the components into a toolbox. Behind him, Kim Carsons and Mike Chase lay dead in the dust of the Boulder Cemetary (*WL*: 26). We also learn that Joe the Dead has had the various Kim manifestations under close surveillance, while also influencing facets of the control machinery into a state of conflict: 'So Joe the Dead has two sets playing against each other: Bickford and Hart, both Rens, Directors, with their Sekhem Technicians and an army of Guardian Angels' (*WL*:10). It becomes apparent that Mike Chase works as a stooge for Old Man Bickford, a key figure in the control 'establishment' that Kim and Margaras Unlimited have been working to undermine. Joe the Dead, identified as a 'Sekhem' soul and therefore 'relatively immortal', shares the same concerns for human development that motivate Kim, and so he shows a level of sympathy for Kim's efforts to redress the power balance, escape the confines of the physical body, and exist on a spiritual/astral plane:

He understood Kim's attempt to transcend his physical structure, to which he could never become reconciled, by an icy, inhuman perfection of attitude, painfully maintained and refined to an unbearable pitch. Joe turned to a purity of function that could be maintained only by the pressure of deadly purpose. (*WL*: 29)

As a result of this drive to dispense with human fallibility and physical structure, Joe the Dead and Kim undertake different quests to challenge the monopoly of the Gods. As opposed to Kim's organisational opposition, Joe's mission focuses on an attempt to converse with Hassan i Sabbah, the figurehead of a legendary resistance movement set on overthrowing the Gods' dictatorship in order to redress the condition of arrested evolution hampering humanity: '[Joe] knew there was only one man who could effect the basic changes dictated by the human impasse: Hassan i Sabbah: HIS. The Old Man of the Mountain. And HIS was cut off by a blockade that made the Gates of Anubis look like a dimestore lock' (*WL*: 190). The history and legend of Hassan i Sabbah have influenced, and been interwoven into Burroughs'

fictional routines since the Nova Trilogy and in *The Western Lands*, the eleventh-century Ishmaelite assassin once again signifies the underground resistance and group rebellion empowering Burroughs' counter-communities. Hassan i Sabbah's inclusion also takes us back to Burroughs' mission to inspire narrative escape-routes through creative mergers between art and science. The powers of fiction and narrative fantasy are embedded in the previously mentioned axiom accredited to 'HIS', 'nothing is true—everything is permitted', in other words, everything is illusion and as such fiction provides the perfect medium for initiating counter spaces that harness this limitless possibility. Just as Kim and his Margaras Unlimited colleagues pursue various biological and spiritual routes into 'SPACE', Joe heads another outlaw community with a different mission to transcend and re-evaluate the human condition. Joe the Dead belongs to a select breed of outlaws known as the 'natural outlaws', 'NOs' dedicated to breaking the so-called natural laws of the universe foisted upon us by physicists, chemists, mathematicians, biologists, and, above all, the monumental fraud of cause and effect' (*WL*: 30), all of which reflect Burroughs' continued distaste for the 'vested interests' directing life sciences and monopolising all forms of knowledge acquisition.⁵²

Joe takes on the role of a 'technician', overseeing experimentation that contravenes the methods and regulations enforced as law through the life sciences. Whereas Kim and Neferti adhere to cloning and transplant procedures in a vain effort to initiate the next stage of human evolution, Joe the Dead uses altogether different methods to cause the necessary changes for advancement of the 'human artifact'. Joe and his Natural Outlaws specialise in a unique form of 'evolutionary biology' designed to instigate changes to the human species based on a total infringement of accepted reproductive and developmental ethics, rebellious acts that disregard the boundaries of humanity and replace them with more progressive hybrid types. Joe's numerous experiments take many forms, such as brain transplants involving human and chimp subjects, research areas that seem to mirror those sanctioned and funded by the Countess De Gulpa and the Pickle Factory in *Cities of the Red Night*. However, this time Burroughs suggests that under Joe's supervision, these subversive experimental procedures may lead to new potentials for the (post)human condition, the exact type of enhancements that Kim has been striving for via

⁵² Burroughs' 1981 interview with Edmund White, 'The Inner Burroughs' in Lotringer, *Burroughs Live*, 476.

established rewrite protocol. The central difference between Kim's genetic modifications and Joe's 'evolutionary biology' stems from Joe's aim to initiate a drastic change within the species by 'bringing into contact species that had never been in contact before' (*WL*: 37); thus generating the foundation for the potential 'hybridization' of humankind:

The hybrid concept underlies all relations between man and animals, since only a being partaking of both man and animal can mediate between two species. These are blueprint hybrids, potentials rather than actual separate beings, capable of reproduction. It is the task of the Guardian to nurture these half-formed creatures and to realize their potential. (*WL*: 42)

Joe takes on the role of genetic mapmaker and 'Guardian', nurturing these spliced beings so that they may develop from 'blueprints', or 'potentials' into functioning, sustainable new life-forms, a position that takes us back to Stephen Dougherty's belief that complex-coded systems lead to a reassessment, and perhaps even replacement, of the human condition.⁵³ The blueprints, or hybrid beings, part human, part animal, can mediate between species as viable potentials capable of replacing the stultified human condition, and as such they provide a more attainable utopian potentiality than that contained in the western lands blueprints.

In contrast, Kim's methods have had limited success because his genetic experimentation has produced biological copies of existing subjects bound to bodily incarceration and pre-ordained to revisit the 'birth-death' fate of their predecessors. Joe's hybrids may hold the key to evolutionary and transcendental success because the genetic maps from which they are derived are not beholden to ancestral traits and the replication of existing coding, but suggest new genetic combinations giving rise to an array of new species. As we are aware, Burroughs created the Red Night trilogy as a vehicle for narrative potentials, counter-histories and alternative modes of existence, that challenge prescribed renderings of social reality. The text presents possible worlds to emerge and grow in tandem with the reader's sense of reality. It is vital to note that Joe's Hybrids are blueprints, or life-maps first, and a potential new race of being second. At this stage they are 'half-formed creatures' that require Joe's nurturing and guardianship in order to realise their potential status as future hope for a progressive existence. The text enables these beings not only as fictional renderings of biotechnological coding, but also because the narrative frame in which they exist

⁵³ Dougherty, 'Biopolitics of the Killer Virus Novel', 9.

permits entry into multiple realms or 'zones' beyond the confines of singular authorial control. As Burroughs stated in a 1987 interview: 'I do think all writers [...] are trying to create something that has an existence apart from them, apart from the writer [...] [something that] would literally step out of the picture or book'.⁵⁴ The hybrids obviously do not exist outside of the text in literal terms, but Burroughs suggests that the interchange between author, text and reader creates a portal whereby these beings may pass beyond the textual boundaries of the novel and into other fictional zones of becoming. Burroughs is suggesting that the reader also becomes a guardian of hybrid textual forms alongside Joe the Dead, and that our involvement as readers in fact generates hybrid versions of the novel just as Joe fashions the genetic blueprints that enable new life-forms to come into existence. At this juncture, though, we must assess the relative success of the competing post-human projects in *The Western Lands*, and consider the extent to which these hybrid potentialities have subverted and exceeded their military-technological origins.

The Post-humanist Project

This focus on genetic map-making and textual potentiality leads us back to the merger between life sciences and systems theory previously discussed in relation to the Carson clones in *Place*. As we have seen, the translation of the body into code and binary systems has been treated as a form of counter-assault, or rewrite in the previous novel, an act designed to disturb the subjective incorporation of the body into unchallenged control systems and information loops. Thus, the fusion between life sciences and cybernetics framing *Place* was ultimately viewed in terms of resistance against cryptographic control and loss of subjecthood. However, as Burroughs repeatedly outlined in essays and interviews such as those included in *The Job* (1970), the route to human development would stem from the correct application of scientific endeavour, and so the manipulation of cybernetic/genetic code in *The Western Lands* points to much more than ideological and bodily resistance. As already discussed, Burroughs' fiction has traditionally embraced the expression of bodily struggle, the application of literature as a form of guerrilla resistance designed to voice the opposition of the human subject overwhelmed by biotechnological

⁵⁴ Burroughs' 1987 interview with Eldon Garnett, 'Afterlife' in Lotringer, *Burroughs Live*, 789.

violation and control. This epistemological conflict was already instigated with the recognition of the 'soft machine' as an undesirable consequence of our integration into the feedback system. In this sense, literature becomes the central weapon against this assimilation, a move that David Porush describes in *The Rise of Cyborg Culture* as:

turning the weapons of artificial intelligence and computers and formal systems of control and communication to the advantage of art, to resist the machine with the guerrilla weapons of literature: metaphor, irrationalism, transcendence, ambiguity, and silence.⁵⁵

Despite this 'guerrilla resistance' via literary techniques, Porush believes that art involuntarily expresses cyborg tendencies that create a marriage between the expressive artist and the technologist. However, in *The Western Lands*, this merger is far from an involuntary action. At this stage, Burroughs exploits the potentials to be garnered from the collision of the artificial and the natural, a process he explores within his fictional space to further detach cybernetic systems from limiting Cold War frames of reference. Burroughs' fictional worlds merge with the possibilities contained within the technological simulation, the modelling and replication made possible by the computer programme and theories of information. Therefore, it stands to reason that Joe the Dead's experimentation signifies a positive step forward for science and evolution. In spite of the dehumanising horror of genetic engineering, this is Burroughs' vision of a posthuman rather than humanist mission where the natural and the artificial become integrated, and science and art begin to share hybrid methodologies. The NO's hybrids are composite beings resulting from this integration, beings that effectively obscure the boundaries and hierarchies between species. They are the manufactured products of the merger between science and art, undefined and unconstrained life forms permitted to undergo multiple transformations and constitutions within the nurturing framework provided by literary and biotechnological blueprints.

Joe the Dead may also be considered a hybrid of sorts because he is a cybernetic organism, a fusion of living human tissue and machine no longer

⁵⁵ Porush, *The Rise of Cyborg Culture*, accessed via <http://www.pum.umontreal.ca/revues/surfaces/vol4/porush.html>.

constrained by the laws of nature. He is a supreme being with the potential power to shape the fate of mankind for good or ill:

Joe had a number of devices that he could fit into a socket just below the elbow of his severed arm. One was a shock unit, with two long needle-sharp electrodes that could be jabbed into an opponent to deliver the shock inside. He had a cyanide syringe, for instant death, and an air-powered tranquilizer dart gun. He regarded these as toys, for which he would have less and less use as he pursued his research projects. (*WL*: 36)

Here, the 'toys' that Joe uses to immobilise his opponents are not merely hi-tech weapons systems, but aspects of techno-science that have been incorporated into the body as replacement parts that simultaneously compromise and enhance the 'natural' organism. The likes of cosmetic surgery, prosthetics and tissue engineering in recent medical history have all made concepts of the cyborg body more tangible and acceptable, and yet Burroughs' vision of the technologically enhanced body draws us back to threats stemming from these same technological innovations. Joe's severed arm is replaced by an array of sophisticated weapons designed to extinguish life with the minimum of effort; thus he internalises the paradox of Cold War cybernetics as both key to global destruction and maintainer of life. This paradox explains why Joe regards these weapons systems as minor amusements that have little or no significance in his hybrid research projects. Anne Balsamo has highlighted this type of inconsistency in her reading of cyborg bodies by stating that:

Such beliefs about the technological future 'life' of the body are complemented by a palpable fear of death and annihilation from uncontrollable and spectacular body threats [...] Although the popularization of new body technologies disseminates new hopes and dreams of corporeal reconstruction and physical immortality, it also represents and obfuscates our awareness of new strains on and threats to the material body.⁵⁶

Balsamo is arguing that the cyborg belongs to two incompatible systems of meaning, concepts of the organic or 'natural' and concepts of the 'technological/cultural'. An ideological war is taking place between these competing systems of meaning, a conflict that marks out the material struggles of the physical body as it is trapped within, and in some cases consumed by the information loop. Joe can be seen as Burroughs' characterisation of this type of struggle, he is what Balsamo would

⁵⁶ Anne Balsamo, *Technologies of the Gendered Body: Reading Cyborg Women*, (Durham: Duke University Press, 1996), 1-2.

describe as a 'boundary figure' caught between body technologies that are viewed as 'life-enhancing', and the destructive properties that may follow as a consequence of their application.⁵⁷ As Joe's portion of the narrative unfolds we learn that he was brought back from hell, tortured and horribly scarred: 'Joe was in hideous and constant pain. His left arm and side clung to him like a burning mantle. That pain could be alleviated by morphine. The other pain, the soul pain, morphine and heroine could not touch' (*WL*: 27). This 'soul pain' is so excruciating that even the technologies that complete and sustain his body fail to erase the agony; thus the conflict between natural and technological systems manifests itself through untreatable bodily symptoms. This places him in a unique position to understand the vulnerability of the human condition, while at the same time, embodying the technological systems capable of destroying all human life. The internal struggle taking place in Joe's techno-body explains his empathy for Kim's quest to transcend bodily confines completely, for he is ensnared in a borderland between human frailty and technological perfection.

As a hybrid entity, Joe is well placed to refashion how the body is constructed, both as a material object and as a discursive process. In other words, he is capable of making drastic alterations at a genetic level that engender new power relations for living subjects within the communication system. As the incorporation of Wiener and Von Neumann's systems theory into Cold War opposition has demonstrated, technology is manipulated to convey the practices and forces of the control apparatus, and consequently these become inscribed onto the body. I have already identified Joe the Dead as a borderline figure, caught between this cybernetic inscription and the natural life cycle. Yet, his hybrid creations, as potential new life forms, are able to escape from these networked power relations by redefining the boundaries and hierarchies separating human, animal and machine altogether:

For Man is indeed the final product. Not because Homo sap is the apogee of perfection, before God himself gasps in awe—"I can do nothing more"—but because Man is an unsuccessful experiment, caught in a biologic dead end and inexorably headed for extinction [...] The hybrid concept underlies all relations between man and other animals, since only a being partaking of both man and animal can mediate between two species. (*WL*: 41-42)

⁵⁷ *Ibid.*, 5.

This mediation between humans, animals and machine intelligence not only enables new species engineered specifically for survival in space, but also disrupts the stable categories and dualisms written onto the body. Man is identified as an ‘unsuccessful experiment’ most certainly ‘headed for extinction’, and so the hybrid concept offers a prototype escape-route into new bodily configurations. Oppositions between species and established power relations within the information system are made unstable by these genetic potentialities, because they are no longer assimilated into the binary classifications fuelling all aspects of the Cold War machinery. Joe, the boundary concept, on the other hand, is held back by the internal conflicts between nature and technology manifesting as human pain responses beneath the high-tech circuitry and mechanical precision enhancing his body. Burroughs chooses to place the cyborg in the dual role of creator and potential destructor for a specific purpose. Joe represents the realisation of Cold War technology as it is internalised within the body. He signifies the information systems furthering weapons technologies, and as such this life-enabling/war-enhancing machine-being can be considered Burroughs’ final, and most potent, Cold War counter-history. David Porush provides a convincing explanation for the type of paradox between creativity and destruction exemplified by Burroughs’ renegade cyborg:

Why does the atomic bomb fade as an icon in the 1980s and 1990s, even while nuclear weapons stockpiles increase and proliferate, to be replaced by the computer, the AI, the robot, the cyborg as the most important icon of our generation? The answer, again, is epistemological: the atomic bomb was a very explosive technological device, but as such was merely a symptom or manifestation of the very same epistemology that is more fundamentally represented by the cyborg.⁵⁸

Burroughs’ fictional rendering of Joe the Dead reflects this epistemological mapping of cybernetic roots and nuclear development as part of the same scientific, cultural and military trajectory. As a consequence of this developmental trajectory, Joe can be linked directly to the B-23/Red Night virus described in *Cities*. This is because the Red Night viral mutations generated by radiation fallout and Joe’s cybernetic bodily enhancements share the same Cold War nuclear accretion point. The technological enhancements altering, improving and extending the functional properties of Joe’s body sound like the realm of fantasy and science fiction, and yet it has a resonance of

⁵⁸ Porush, *The Rise of Cyborg Culture*, accessed via <http://www.pum.umontreal.ca/revues/surfaces/vol4/porush.html>.

the types of weapons systems and cybernetics research funded by the US Air Force and other military institutions during the mid-1960s, projects described by Porush as attempts to build and deploy 'exoskeletons, master-slave robot arms, biofeedback devices and expert systems'.⁵⁹ As an artifact-organism functioning via a set of in-built self-regulatory controls, Joe the Dead's biotechnological adaptation also reminds us of Wiener's aforementioned attempts to design and deploy computer mechanisms for the guidance and delivery of pre-emptive missile strikes and the surveillance of anti-aircraft. Just as Wiener struggled with the concept of his 'thinking machine' being funded by and ultimately integrated within military operations, so does Joe struggle with the conflicting merger between the natural and the technological, the creative and the destructive as they are enveloped within the DNA structures and binary codes shaping his painful existence. However, Joe is the ultimate culmination of Burroughs' outlaw characterisation, a cyborg survivalist existing outside of what Kendra Langeteig terms 'socially constructed fixity' and 'historically conscious' boundaries, in a virtual realm of liberating indeterminacy.⁶⁰ It is this unique boundary position that enables Burroughs to cast Joe as the final, and most potent, aspect of his counter-historical assault.

Although Joe is blighted by internal conflicts that impede his viability as the next evolutionary step, his placement on the borders of socially prescribed fixity enable him to take on a spiritual role as creator of an undefined and heterogeneous hybrid species specifically designed for survival in space. This master architect role reflects, re-evaluates and even reconstitutes past considerations of the function of the cyborg in Cold War space programmes. While the US Air Force were carrying out vast research programmes focusing on the adaptability of cybernetic feedback systems in weapons design, other areas of the Cold War-induced scientific community were turning their attentions upon the potential uses of cyborg bodies in space travel. In September 1960, an article by Manfred E. Clynes and Nathan S. Kline appeared in the journal *Astronautics* entitled 'Cyborgs and Space'. Clynes and Kline proposed that: 'altering man's bodily functions to meet the requirements of extraterrestrial environments would be more logical than providing an earthly environment for him in space', and that 'space travel challenges mankind not only technologically but also spiritually, in that it invites man to take an active part in his

⁵⁹ Ibid.

⁶⁰ Langeteig, 'Horror Autotoxicus in the Red Night Trilogy', 163.

own biological evolution'.⁶¹ This biological evolution would be enabled by developing knowledge of the cybernetic aspects of 'homeostatic functioning', therefore making it possible to initiate adaptation: '*without alteration of heredity* by suitable biochemical, physiological, and electronic modifications of man's existing *modus vivendi*'.⁶² Clynes and Kline go onto discuss the advances in knowledge leading to the design of instrumental control systems which may facilitate biological changes to allow man to live successfully in the space environment. Under the auspices of control theory they provide a comprehensive list of the organisational systems that may be implemented to achieve this. The devices and enhancements they discuss include biochemical solutions for the regulation of bodily functions, such as an osmotic pressure pump designed to administer drugs for optimum physiological and psychological performance, hypothermic controls to regulate body temperature and induce states of hibernation for deep space travel, and cardiovascular control based around the application of control-system theory in biology. This is referred to as the 'cyborg technique', wherein electric stimulation is used as a means of regulating cardiovascular functioning.⁶³ Rather than cause the subject to become a 'slave to the machine', Clynes and Kline describe cyborg technologies as a liberating development that would release the subject from 'robot-like' problems of existence, and free the individual to 'explore, to create, to think and to feel'.⁶⁴

Obviously this type of analysis had an impact upon Burroughs consideration of space travel and the evolution of the 'human artifact' during the 1960s onwards, a preoccupation culminating in such comments as those made to Arthur Shingles in 1981:

Within that system I see the only possible hope for the species in space. I believe that more and more [...] going into space involves mutation. You don't go into space as you are any more than a water creature leaves the water as it is [...] Astronauts are just going up in aqualungs, which I think is the wrong way. There have to be certain biologic changes, permutations. So one has to look at the organism to consider how it can be altered.⁶⁵

⁶¹ Manfred E. Clynes and Nathan S. Kline, 'Cyborgs and Space', , *Astronautics*, 14.9 (1960), 26-75, accessed via <http://search.nytimes.com/library/cyber/surf/022697surf-cyborg.html>.

⁶² *Ibid.*, 74-75, (Clynes' and Kline's emphases).

⁶³ *Ibid.*, 74-75.

⁶⁴ *Ibid.*, 74-75.

⁶⁵ Burroughs' interview with Arthur Shingles 'Mutation, Utopia and Magic' in Lotringer, *Burroughs Live*, 517-518.

Burroughs concurs with Clynes' and Kline's approach to space travel based around bodily adaptation as opposed to environmental alteration, a process he sees ending with mutations that reconstitute what it actually means to be human. Although cybernetic processes are recognised by Burroughs as a possible means for initiating the long sought after spatial and spiritual utopia central to the quest narrative in the Red Night trilogy, the following statement also made in 1981 appears to question the motivations and methodologies behind space programmes in the climate of conflict and control:

The human species is in a state of neoteny. That is a biological word used to describe an organ that is fixated in what would ordinarily be a larval or transitional stage. Perhaps the next step the human makes will be made the same way: the astronaut is not really looking for space; he is looking for more time to do exactly the same things. The space program is simply an attempt to transport all our insoluble problems and take them somewhere else.⁶⁶

Just as Jameson noted that the concept of utopia involved moving society's problems and conflicts outside of social and environmental boundaries, Burroughs suggests that space programmes in their current state signify a momentary diversion from, as opposed to a solution to, our arrested evolution and insoluble socio-political tensions. At this point, Burroughs' view of spiritual and biological development begins to deviate from Clynes' and Kline's consideration of cyborgs and space because the writer persists in drawing our attention to Joe the Dead's aforementioned boundary status and indeterminate identity. For Clynes and Kline, the cyborg represents liberation for the human subject, a state where unconscious bodily actions are controlled by the machine half; thus freeing the individual to attain greater levels of creative achievement. Burroughs' cyborg survivalist, as already discussed, is denied this level of harmony between bodily impulses and mechanised control. He represents the discord and ambiguity of opposing systems of meaning, as they collide to create the paradox of biotechnologies that sustain and improve life and incur mass destruction with equal measure. This is not to say that Joe the Dead does not play an integral role in Burroughs' fictional space programme, but unlike Clynes' and Kline's view of cyborg evolution, Burroughs sees the machine being as a catalyst for posthumanity for the space age.

⁶⁶ Burroughs' interview with Michael White 'Astral Evolution' in Lotringer, *Burroughs Live*, 490.

If we are to evaluate the overall success of the transcendental quests in *The Place of Dead Roads* and *The Western Lands*, we must first bear in mind the distinct lack of narrative closure and resolution in both novels. For Kim Carsons, and the Johnson family, progress constitutes a requisition of control system biotechnologies for the purposes of cloning and collective subjecthood. By sending his clones on covert missions within the control apparatus, Kim subverts the system from within and initiates the foundations for a global takeover. The Johnson family achieve success in their method of organisational resistance, first by redirecting 'Big Science' research, and second by initiating a limitless guerrilla assault on the system. By harnessing the power of a collective mind able to move from one cloned body to another, the Johnsons create the conditions for a counter-assault beyond time and space. However, by coding the Johnson family members with the genetic deficiencies of their forebears, Kim propagates the cyclical 'birth-death gimmick' and consequently fails to progress the human condition beyond its current bodily limitations. The quest for spiritual transcendence and post-human ability continues, then, in the biological rewrites and blueprint fabrications implemented by Kim Hall/Lee, or Neferti in *The Western Lands*. In their quest for immortality, these character incarnations continue to form counter-organisations to redress the Gods' monopoly, and apply Cold War-induced biotechnological research to rewrite the structure of the human body. As a subsequence of this continuation, their quest to replace the western lands' blueprints with their own boundless utopias remained a work in progress. At this point, Burroughs introduces a new fusion of scientific discovery and artistic imaginary in the form of Joe the Dead, the aforementioned cyborg creator. Although Joe's cybernetic body and Sekhem soul status permit him a degree of immortality and indestructibility that raises him above Kim/Neferti to become the more successful posthuman project, it is his hybrid creations that hold the key to transcendental success. These blueprints or potential beings signify the most triumphant appropriation of Cold War biotechnology because of their status as potential, burgeoning life forms unimpeded by systematic control. At the end of the final novel in the trilogy, then, physical transcendence in the form of a 'non-body' route into space has not been fulfilled. However, the Natural Outlaw's hybrid fusions have instigated the possibility for future forms of becoming and self-fashioning beyond systems categorisation, and Burroughs' lack of narrative closure opens the door for their infinite replication and development.

At the beginning of this chapter I posed a question: are these novels a revolutionary narrative escape from the acceleration of game planet device, or an inescapable assimilation into Cold War scientific and technological networks? Taking into account the processes of becoming highlighted above, I would conclude that *Place* and *The Western Lands* constitute a successful blueprint for textual escape. This is based upon realms of biotechnological advancement and fictional becoming that transcend the confines of the singular narrative frame. Hence, Burroughs avoids a total assimilation into Cold War networks by merging the doctrines of science and art into multitude of narrative permutations. As far as Paul Virilio and Jean Baudrillard are concerned, technological ‘potentialization’ leads only to the acceleration of the arms race and an overall degeneration of the social condition. Conventional war disintegrates into strategic conflicts based upon the tactical manipulation of smart weapons systems, and time and space become condensed into a system of indifferent equivalence. Therefore, all technological endeavours, such as those designed to explore outer space become reflections of the military-industrial complex. Burroughs’ fictional potentialization also leads to instantaneity and the fusion of reality and simulation, time and space, but rather than viewing these mechanisms as purely symptomatic of strategic deterrence and game planet device, he sets out to use them as schemes for perpetual posthuman becoming. Whereas Virilio and Baudrillard’s consideration of techno-scientific productivity is synonymous with a general state of developmental inertia, Burroughs’ fictional scientific possibility paves the way for new intellectual and corporal freedoms. The novels contain a specific form of textual blueprint that is presented as affecting and potentiating biological development. Consequently, the Johnson Family requisition of gene therapy and human cloning, and the Natural Outlaws’ experimentation with cybernetic enhancements and spliced life forms transcend their Cold War military counterparts.

For Burroughs, biotechnological testing and textual experimentation are facets of the same posthuman quest, and so are subject to multiple rewrites and reconfigurations. This permanent state of becoming or ‘potentialization’ opposes and negates Cold War scientific ascendancy with an emergent and perpetually evolving textual fluidity. It is this textual adaptability and fluctuation that provides not only an antidote to Cold War intensification, but also a means for initiating utopian ideals. At the outset, I suggested that *Place* and *The Western Lands* constituted the type of

utopian quest narrative described by Ihab Hassan and Fredric Jameson as contrary to the totality of the information network. The Johnsons and NOs applied techno-scientific research and counter-cultural assaults to achieve the sought-after transcendental utopianism exemplified by the Egyptian western lands. However, with each quest into space/the afterlife remaining in progress at the close of the trilogy it is ultimately the boundless textual possibility framing these quests that signifies utopian achievement. As far as Burroughs is concerned, then, it is not the fulfilment of the quest, but its perpetuation through liberating textual zones that facilitates transcendental escapism from permanent Cold War emergency.

Burroughs' utopian 'potentialist' quest for forms of textual escape in the Red Night trilogy represents not only multiple reconfigurations of the Cold War historical record, but an overall rejection of temporal and technocratic confines altogether. In this sense, Burroughs conceives of fictional possible worlds and techno-scientific modes of being categorically different from the historiographical mapping and codification of this world. Don DeLillo's fiction also exceeds a straightforward review of Cold War history, but rather than engender a utopian textual escape from the planet's 'plagued' control systems, he addresses the historical imbalances and inconsistencies resulting from an all-pervasive military-industrial complex. In contrast with Burroughs, DeLillo's 'neo-realist' fiction becomes a means for coming to terms with the representational interruptions indicative of the loss of coherent historicity. Therefore, the fragmentary structure of *Underworld* (1998), his most ambitious fictionalisation of forty years of public and private history, is structured to reflect the gaps and omissions in our Cold War historical memory. In Chapter One, I argued that *White Noise* fictionalised the debilitating effects of a Cold War unconscious, and that in response the narrative established a hermeneutic in order to initiate a critical commentary to challenge this condition. As the following chapter will identify, the primary objective of *Underworld* is to fictionalise the military-technological under-history underpinning this collective Cold War unconscious, and demonstrate how this condition has contributed to a contemporary war of information.

Chapter Four: Information War and the Militarization of Media Technologies in Don DeLillo's *Underworld*

One may surmise that, just as the emergence of the atomic bomb made very quickly the elaboration of a policy of military dissuasion imperative in order to avoid a nuclear catastrophe, the information bomb will also need a new form of dissuasion adapted to the 21st Century. This shall be a societal form of dissuasion to counter the damage caused by the explosion of unlimited information.¹

Paul Virilio's identification of the 21st Century 'information bomb' as the natural successor of nuclear weapons systems and strategies of deterrence, is based on the prognosis that the sheer velocity of information stemming from the Cold War military-industrial complex has resulted in a total information war. According to this view, the war of electronic data and knowledge acquisition has superseded traditional forms of military mobilisation and siege in favour of a global network of heterogeneous conflict and competition. The potential for an information 'explosion' or for the 'risk of accidents on the information superhighway', as Virilio describes it, derives not from the generation of new knowledge and techno-scientific research per se, but from the sheer *speed* of electronic data as it is processed and circulated through channels of computer communication worldwide.² The systems of communication discussed by Virilio here, namely the development of computer networking and the resulting contemporary internet, reveal direct social and economic intimacies between Cold War militarization and computer science. The proliferation and velocity of communications circulating in this military techno-scientific system, then, produces and maintains the disorienting socio-cultural symptoms indicative of postmodernity. As a consequence, the subject cannot discern a coherent sense of historicity with which to contextualise the past and present of lived experience. Hence, the impact of the information bomb exacerbates the mystification and disorder of the Cold War historical unconscious.

¹ Paul Virilio's interview with Louise Wilson, 'Cyberwar, God and Television', eds. Arthur and Marilouise Kroker, *CTheory*, (12th January, 1994), accessed via <http://www.ctheory.net/articles.aspx?id=62> .

² *Ibid.*, (Virilio's emphases).

As I have already demonstrated in Chapter One, Don DeLillo had previously considered the effects of this kind of socio-historical unconscious in *White Noise*. He created a narrative that encapsulated the confusions and paranoia of a Cold War containment community unable to survey, process and assess historiographical information. Therefore, the characters misinterpreted the veiled connections and significance of the information network, and sensed a kind of 'magic' and conspiratorial dread stemming from the historical resonance at the margins of their conscience. Likewise, DeLillo's *Underworld* (1998), explores the notion of a historical unconscious in the way that it considers a military-technological history at the margins of the official record. To recap, according to Fredric Jameson, the novel is the most appropriate means for considering the historical artefact because it is steeped in the ideological structure of the culture and society in which it is produced. In this sense, the text replicates the ideological conditions of the political unconscious, while also commenting upon its effects. Literary modes of production, then, can function as a response to subjective historical social relations because they become 'symbolic' acts of cultural revolution, or, an 'ideologeme of class discourse'.³ For Jameson, this narrative ideological response is a cultural opposition to the class struggles and inconsistencies of the late-capitalist system. In *Underworld*, this ideological response takes the form of a critical survey of the military-technological systems underpinning all kinds of production and information distribution. The novel surveys the historical fragments caused by the military-industrial complex fuelling late-capitalism, as a means to initiate a narrative dialogue to reconsider their impact on subjective experience.

This military-industrial distinction is crucial because it can be extended to take into account a number of techno-scientific and electronic advances occurring during periods of heightened Cold War opposition, containment and deterrence, advancements in radio, satellite and audio-visual media to name a few. What makes these military-technological associations so potent is their ability to spread into the domestic sphere; thus connecting private consumption, corporate entities and government agencies in a cycle of exchange that propagates mindsets of competition and knowledge supremacy.

³ Fredric Jameson, *The Political Unconscious: Narrative as a Socially Symbolic Act*, (London: Methuen, 1981), 89-90.

For Virilio, the outcome of this 'absolute velocity of electronic data' is a 'revolution in the military' along with an all-encompassing 'war of knowledge' that may pose a threat to democratic processes and principles if left unchecked:

Upon leaving the Whitehouse in 1961, Dwight Eisenhower dubbed the military-industrial complex 'a threat to democracy'. He sure knew what he was talking about, since he helped build it up in the first place. Something is hovering over our heads which looks like a cybercult. We have to acknowledge that the new communication technologies will only further democracy if, and only if, we oppose from the beginning the caricature of global society being hatched for us by big multinational corporations throwing themselves at a breakneck pace on the information superhighways.⁴

Virilio's emphasis upon Eisenhower's paradoxical assertion back in 1961 about the threat emanating from the military-industrial framework advanced by his administration, helps to demonstrate the inextricable ties between military investment and innovations, corporate distribution and domestic consumption. These provide the basis for the contemporary 'cybercult', as Virilio describes it, the fusion of public, private and martial interests sustained by the logic of the info-war. Similar (and often quoted) observations have been made by Fredric Jameson in connection with the affiliation between Cold War militarization, academic research and technology as networked products of Eisenhower's military-industrial complex. Jameson has seen this global culture as the 'superstructural expression of a whole new wave of American military and economic domination throughout the world', and the unfortunate underbelly of the late-capitalist, or postmodern era.⁵ Although Jameson acknowledges the military-industrial potency synonymous the late-capitalist system, he does not provide a detailed consideration of the intricacies of this relationship; thus reflecting an overall lack of focused research in this field. Therefore, we may fortify Virilio and Jameson's cultural and military-economic observations while deciphering DeLillo's particular mode of contemporary entertainment literature as it engages with this global condition.

This assessment of the post-Cold War age as a global network of technological competition, profiteering, and unlimited information flows, as we shall see, provides us with a specific means for interpreting the framework of *Underworld*, an immense and

⁴ Ibid.

⁵ Fredric Jameson, *Postmodernism or, The Cultural Logic of Late Capitalism*, (Durham: Duke University Press, 1991), 5.

varied fictional chronicle of the last half of the twentieth century, a consideration of the military-technological and semiotic wastelands compromising historical resonance for our late-capitalist, media-saturated, post-Cold War society. The novel covers such diverse and interconnected ground as the threat of atomic warfare, McCarthyism, government agencies and their covert operations, the Cuban Missile Crisis, the Vietnam War, secret research facilities, waste management, late capitalism, domesticity, consumerism, religious conviction, baseball, patriotism, radio broadcasting, television, video technologies and the internet. To counteract these aspects of public and private experience and corporate, military, political and media domains, DeLillo responds with what he describes as an 'under-history', or counter-history of presidential assassination, televised highway murder, political protests, adultery, greed, guilt, political intrigue and paranoia, mortality, graffiti, postmodern art and technological totality. The latter seem to convey the 'underworld' of the title, the marginalised, and at times, concealed and despised aspects of a cultural unconscious that negate attempts to locate and define a centre within the official accounts of the period. This is because, in DeLillo's novel, the under-history or underworld briefly listed above begins to rise to the surface of public consciousness as de-contextualised cultural data. It forms a return of the repressed and the abject causing problems of historical interpretation for those characters trying to balance personal experience and national identity in the reified techno-scientific society to which they have become accustomed. Waste management specialist Nick Shay, DeLillo's central, yet reserved protagonist, considers this underlying socio-historical reality when visiting a nuclear disposal facility in Kazakhstan. While witnessing scenes of underground nuclear weapons detonation for private profit, Nick comments that there is a peculiar connection between weapons and waste based on the idea that waste is the: 'secret history, the underhistory' that over time reveals the 'dark multiplying byproduct' obscured by war game rhetoric.⁶ The fusion of: 'two streams of history, weapons and waste' (*U*: 791) rise to the surface in *Underworld* to reveal the potentially devastating military-industrial excess responsible for established cultural, economic and historical frameworks. DeLillo's focus on a secret military-industrial 'underhistory' underpinning all social and economic relations is reminiscent of the veiled schemes and

⁶ Don DeLillo, *Underworld*, (London: Picador, 1998), 791, hereafter cited as *U*.

interconnections delineated in Thomas Pynchon's conspiratorial novels, particularly *The Crying of Lot 49* (1966), and *Gravity's Rainbow* (1973).⁷

We see that what links these socio-historical fragments and cultural artefacts, both public and private, are their representation via the medium of mass media technologies. *Underworld* bombards us with a montage of mass-media communication flows and related Cold War era technological advancements that impact upon the historical timbre of the novel, and yet DeLillo chooses not to make explicit each of the various and complex interconnected ways in which these communication flows and media technologies have been derived and implemented from their basis in military expansion. Rather, he leaves crucial gaps and spaces between these military-industrial origins and associations in a bid to suggest another under-history or Cold War unconscious always at the margins of contemporary society, an unconscious leading to the technological de-realisation and loss of temporal placement suffered in the present. One key statement stands out within the pages of the novel to convey this viewpoint, a powerful message that 'all technology refers to the bomb' (*U*: 467), an observation made by Nick Shay's younger brother Matt, that places the bomb at the centre of all technology and, as DeLillo has stated, reveals nuclear power with all its symbolic energy to be the 'spiritual god of technology'.⁸ As we shall see, DeLillo's recognition of the symbolic and spiritual centre of nuclear technology is a concept shared and enlarged by Paul Virilio in the following statement:

It's just that technologies seriously challenge the status of the human being. All technologies converge toward the same spot, they all lead to a Deus ex Machina, a machine-god. In a way, technologies have negated the transcendental God in order to invent the machine-god.⁹

What unites DeLillo and Virilio, critically speaking, is this realisation that all technologies converge around the same point; thus the technologies driving consumer culture and mass media information flows replicate and merge with their military-

⁷ Thomas Pynchon, *The Crying of Lot 49*, (London: Harper Collins, 1966), 183 pp, and *Gravity's Rainbow*, first published in 1973, (New York: Penguin Classics, 1995), 760 pp.

⁸ Don DeLillo's interview with Jörg Burger, 'Mr Paranoia', trans by Tilo Zimmermann, in *Die Zeit*, 42 (8th October 1998), accessed via http://perival.com/delillo/burger_interview.html.

⁹ Virilio's interview with Louise Wilson, 'Cyberwar, God and Television', accessed via www.ctheory.net.

industrial bases. This merger is so formidable as to compromise historical foundations and displace belief systems in favour of a techno-scientific information loop. The following analysis takes this observation as a starting-point for explaining the wide-ranging Cold War historical fragments and examples of mass-media montage interwoven into the structure of *Underworld*. This reveals an unconscious military-technological trajectory charting the dissemination of this techno-scientific logic throughout the Cold War period and beyond, from atomic research to the creation of the networked 'information bomb' as it picks up speed in the post-Cold War age. A military-technological focus allows us to piece together a pathway through the novel that re-contextualises the fragmented histories presented within it. It is then possible to plot their development and momentum toward the contemporary 'information war' of infinitely reproducible data devoid of critical substance.

This reading of *Underworld*, then, intends to unearth the historical subtext that shapes the course of the novel from its position at the margins of consciousness; the 'under-history' that never takes a complete form in the novel because DeLillo substitutes historical totality with representational gaps. The formation of a military-industrial subtext punctuated by breaks and fissures can be aligned with Fredric Jameson's interpretation of the novel as 'rewriting of the literary text in such a way that the [novel] may itself be seen as the rewriting or restructuration of a prior historical or ideological *subtext*'.¹⁰ This historical subtext may not be immediately present as such in external reality, but the literary text 'always entertains some active relationship with the Real; yet in order to do so, it cannot simply allow reality to persevere inertly in its own being, outside the text and at a distance. It must rather draw the Real into its own texture'.¹¹ By drawing external reality into the fabric of the text, the novelist is able to react to it by articulating a situation and then 'textualising' it. DeLillo sets up exactly this kind of relationship by formulating a narrative around the gaps in our military-industrial consciousness. By doing so, the novel reacts to the degeneration of our interpretative skills, and responds by intimating the Cold War ideological circumstances causing it. For Jameson, history is fundamentally 'non-narrative' and 'non-representational';

¹⁰ Jameson, *The Political Unconscious*, 80, (Jameson's emphases).

¹¹ *Ibid.*, 80.

however the only way it is accessible to us is in narrative form via processes of 're-textualisation', or re-writing.¹² Therefore, *Underworld* fictionalises this inaccessibility of history through historical breaks, and points to the unconscious social experiences and political relations negating historical clarity in the 'Real'. The notion of a Cold War unconscious has prompted the structure of this analysis as a kind of sub-textual mapping with which to plot the military-industrial under-history, so far under-researched in relation to the counter-historical contexts of the novel.

Previously, critics including Frank Lentricchia, Timothy Parrish, Phillip Nel and Peter Knight have produced analyses of DeLillo's fiction that reflect and elaborate upon pivotal statements the author has made about the powers of narrative counter-history to recreate, replace and even instigate the 'balance and rhythm' not experienced in daily life, and to rescue 'history from its confusions' in some 'superficial way of filling in blank spaces'.¹³ These comments have led to the critics' considerations of *Underworld* in terms of a conspiratorial nostalgia inspired by the historical interconnections and aesthetic multiplicity generated by contemporary mass culture. For DeLillo, the specific role of the fiction writer is to 'redeem [the] despair' resulting from these confusions:

Stories can be a consolation—at least in theory. The novelist can try to leap across the barrier of fact, and the reader is willing to take that leap with him as long as there's a kind of redemptive truth waiting on the other side, a sense that we've arrived at a resolution.¹⁴

This desire to locate a 'redemptive truth' in narrative and to 'fill in the gaps' left by unchallenged historical accounts, relates to what DeLillo sees as a need to restore the historical significance and meaningful subject-hood stripped away by the violence of the multimedia event, a phenomenon first witnessed on a global scale with the Kennedy assassination in November 1963. From this moment onward, a manageable sense of reality has become unattainable due to an explosion of data and historical accounts pertaining to the violence of the event. Therefore, DeLillo feels that the general public have become united in the sense that 'history has been secretly manipulated' to such an

¹² Ibid., 81.

¹³ DeLillo's interview with Anthony DeCurtis 'An Outsider in This Society' in *Introducing Don DeLillo*, ed. Frank Lentricchia, (Durham: Duke University Press, 1991), 56.

¹⁴ Ibid., 56.

extent that we are overwhelmed by a 'deeply unsettling feeling about our grip on reality'.¹⁵ By revisiting the trauma of the event and merging fragments of the personal and collective unconscious obscured by instantaneous media replication, DeLillo does explore the desire to return to a coherent and secure sense of the past. However, this is conveyed by leaving historical breaks in the narrative mapping that relate to the conspiracy networks, paranoia and all-encompassing oppositions of the recent Cold War past.

The critical discussions of *Underworld* by Phillip Nel and Timothy Parrish focus on aesthetic debates about the nature of DeLillo's writing, by noting that the Cold War history revisited in the novel refuses to coalesce and remains fragmentary in what Parrish has described as a 'deconstruction' of 'old novelistic virtues' capturing the essence of postmodernity.¹⁶ For Nel, *Underworld* becomes the dialectical nexus of a series of questions concerning the relationship between DeLillo's politics and his aesthetics, modernism and postmodernism and history and mass culture.¹⁷ Although DeLillo does not view his own writing as the epitome of postmodernism, his narratives seem to capture the emphases of a postmodern culture more concerned with the 'photo-montage', as Parrish illustrates, and the instantaneous gratification of the audio-visual medium than the explanatory depth of linear narrative cartographies.¹⁸ This has led to a questioning of whether it is possible for a writer to produce fictions that are not in turn absorbed by the cultural/media forces by which they are inspired. In this sense, DeLillo's readers find themselves subject to a critical bind. On the one hand they recognise and embrace the symptoms and accents of a postmodern condition of surface imagery, substitution and simulation, obese multimedia networks, and a separation from socio-historical significance. On the other hand these symptoms lead to a concern that DeLillo has been incorporated by the media forces he reconstitutes. For Parrish, then, DeLillo's novels reflect a culture that watches live events unfold, and records them for

¹⁵ Ibid., 47.

¹⁶ Timothy Parrish, 'From Hoover's FBI to Eisentein's *Unterwelt*: DeLillo Directs the Postmodern Novel', *Modern Fiction Studies*, 45.3 (1999), 697.

¹⁷ Phillip Nel, 'A Small Incisive Shock: Modern Forms, Postmodern Politics, and the Role of the Avant-Garde in *Underworld*', *Modern Fiction Studies* 45.3 (1999), 725.

¹⁸ Ibid., 697.

multiple playback and reconstruction.¹⁹ This culture of spectatorship has led DeLillo to consider the 'death of the author' in light of televised representation. Cameras have become the medium through which we perceive and dissect the world around us, the root technological cause of problems for Cold War historical comprehension and significance in *Underworld*.

To address this critical bind, a different understanding of the media networks and technological domination present in *Underworld* must be considered. As I have outlined, a range of DeLillo's critics have focused their attentions on the counter-historical power of the text as a means to restore and recreate those histories and accounts eclipsed by the violence and substitution of the media event. However, this quest to locate a complete and comprehensive cognitive map of past to present by 'filling in the gaps' left by Cold War representation only leads the reader of *Underworld* to a sense of bewilderment at the sheer number of textual fragments that simply refuse to merge into a singular coherent narrative account. Although DeLillo has expressed his desire to address the lost stability and substance of daily experience, it is equally useful in the context of this novel to consider the subtext apparent in the breaks, gaps and historical dislocation present within the text. It is not what DeLillo makes explicit in terms of the militarization of technologies, but what is left on the margins of this fictional cognitive map that helps to reveal a historical trajectory. This is a trajectory of military technology adapting and manifesting in the domestic sphere, and culminating with a web of technologies that inform the mediated, de-realised and dislocated techno-culture of the present.

By using this unconscious subtext as a point of discussion, it is possible to critically engage with the development of the military-industrial complex toward the threatening information bomb perceived by Virilio. This enables a greater stylistic and representational understanding of DeLillo's text in terms of the multinational, militarized economy held responsible by Jameson for our 'faulty representations' of the communicational network.²⁰ In this sense, DeLillo's narrative breaks and omissions signify the difficulties encountered when attempting to grasp 'the whole new decentred

¹⁹ *Ibid.*, 698.

²⁰ Jameson, *Postmodernism*, 37.

global network of the third stage of capitalism itself'.²¹ Rather than discuss all the novel's subplots and intricacies, then, I shall focus on technologies: radio, film and television, and the internet, as they are chronologically interwoven throughout the narrative with domesticity, consumerism and military precision. These isolated examples will highlight DeLillo's fictionalisation of the Cold War unconscious, while demonstrating the information war as the logical successor of Cold War era military-industrial efforts.

Technoscience and National Identity: The Radio Era

The prologue of *Underworld* entitled 'The Triumph of Death' was originally a novella written by DeLillo several years earlier for an issue of *Harper's* magazine called *Pafko at the Wall* (1992). It details the action taking place during a baseball game on October 3rd 1951, a memorable day for American mass culture and a mark of how the sporting event helps to mediate American collective identity and cultural experience. The game fictionalised here is the deciding playoff between the New York Giants and the Brooklyn Dodgers for the National League Pennant, a game which saw a 5-4 victory for the Giants and the reverence of player Bobby Thomson for his spectacular home run performance. DeLillo uses this example of the 'great American pastime' to investigate the power of the event to unite the crowd of spectators in a collective form of surrender to an unspoken aesthetic ideology that camouflages disturbing Cold War technological advances and damaging social prejudices. DeLillo focuses in on different social contexts to emphasise the impact of the game, with all its national symbolism and aesthetic potency, on personal and public histories as they become mediated by the national ideology surrounding baseball.

Three sets of character viewpoints rotate throughout the section, each one revealing how socio-political conflicts are shadowed by the momentary unanimity of the event to become representational gaps, punctuated here by DeLillo for closer scrutiny by the reader. The narration is interspersed with the thoughts and observations of Russ Hodges, real-life commentator for the Giants as he broadcasts the game from the

²¹ *Ibid.*, 37.

announcer's booth, the interchange between a group of celebrities in the crowd including J. Edgar Hoover, Frank Sinatra, Toots Shor and Jackie Gleason, and the focalisation of a chance meeting between two strangers, Bill Waterson, a white middle-class architect, and Cotter Martin the black teenager he engages in conversation. Each of these characters feels a sense of national allegiance and collective accord within the stadium that suggests the symbolic nationhood of Cold War containment; therefore the domestic social instabilities, international nuclear threats and conflicts taking place at this moment in time become wilfully diminished in the public historical record. For the purposes of this study of historical subtexts, I will focus on the most pertinent narrative strands: the military framework surrounding Hodges' radio call, and a brief examination of the state of nuclear emergency presented through the characterisation of J. Edgar Hoover.

DeLillo's characterisation of the radio announcer, Russ Hodges, serves to demonstrate how the developing electronic media, in this case radio broadcasting, contributed to this historical effacement by exploiting the constructive quality of mediated discourse. While commenting on the unpredictable nature of the crowd of fans congregating for the sporting spectacle, and his own sense of fortune at being present in the stadium, Hodges is reminded of a time in his distant past when his father took him to see a fight in Toledo, and how the resulting newsreels from that event made him feel like he had been the carrier of 'some solemn scrap of history' (*U*: 16). Hodges' reminiscence highlights an awareness of his role as historical mediator for the baseball game, because he recognises the representational power of his commentary as it is channelled through the radio. In this context, the event, whether it is sporting victory or nuclear weapons testing, will only enter the hallowed domain of public history if it has been represented and reproduced by the electronic media technologies through which we experience the world around us. The Giants versus Dodgers game has, through these channels of representation, developed a unique aura of American accomplishment that passes from generation to generation, and therefore the line between what is real and what is imagined, elevated and simulated begins to erode.

DeLillo's fictionalisation reveals a chain of reconstructions conveying the auratic function of mass media communication flows, beginning with Hodges' recollection of the simulated broadcasts he was party to prior to the emergence of live commentaries

with their immediacy and alleged authenticity. Hodges thinks back to his time in Charlotte, working in a studio 'doing re-creations of big league games' (U: 25). He admits to inventing the majority of the action and excitement in such a way that we are reminded of DeLillo's vivid narrative reconstitution and simulation of past events throughout the novel itself, textual reconstructions supported by the indirect style of discourse used to report Hodges' thoughts, recollections and viewpoint on the game:

Somebody hands you a piece of paper filled with letters and numbers and you have to make a ball game out of it. You create the weather, flesh out the players, you make them sweat and grouse and hitch up their pants, and it is remarkable, thinks Russ, how much earthly disturbance, how much summer and dust the mind can manage to order up from a single Latin letter lying flat. (U: 25)

Hodges' obvious enthusiasm for creating a narrative reality for these 'ghost games' highlights how processes of mechanical reproduction work to construct a false aura that fetishizes the object of study and elevates it to an archetypal status of collective American identity. Walter Benjamin's thoughts on the aura, or ritual purpose, of the work of art in the age of mechanical reproduction are useful here because they stress how the construction of a false aura may come into being through processes of distribution. Benjamin identified aura as a negative function because of its power to elevate the high culture work of art into a position of cult fascination that links historical testimony with the authority of the object. Therefore, Benjamin initially considered the capability of technologies of mass reproduction, such as print media and the growth of film and radio, to be positive developments potentially able to destroy the impulse to fetishize origin, elevate the artistic object and maintain restrictive tradition:

That which withers in the age of mechanical reproduction is the aura of the work of art. This is a symptomatic process whose significance points beyond the realm of art. One might generalize by saying: the technique of reproduction detaches the reproduced object from the domain of tradition. By making many copies it substitutes a plurality of copies for a unique existence. And in permitting the reproduction to meet the beholder or listener in his own particular situation, it reactivates the object reproduced. These two processes lead to a tremendous shattering of tradition which is the obverse of the contemporary crisis and renewal of mankind.²²

²² Walter Benjamin, *The Work of Art in the Age of Mechanical Reproduction*, (New York: Harcourt, 1955), 219.

As a theoretical concept, Benjamin's perspective on the substitution of 'unique existence' for a 'plurality of copies', speaks favourably of the levelling powers to be attributed to technologies of reproduction. He acknowledges their potential to redress the crises of contemporary society as they constitute a channel for the Marxist endeavour to politicize the aesthetic. However, Benjamin, writing at the same time as the Nazi parades and rallies, was also aware of the power of photographic images, newsreels and radio to augment and disseminate fascist ideological impulses. This awareness led him to suggest that, in the context of the Nazi requisition of influence, wealth and culture, mechanically reproduced art and electronic media were at risk of becoming conduits for a manifestation of misleading aura that intensifies and strengthens the manipulation of the masses. In this sense, one of the key elements constituting the power of fascism is its ability to reconstitute the realm of political opposition into the objects of aesthetic consideration. Hodges' radio calls, albeit subject to the 'detachment from tradition' highlighted by Benjamin in his examination of the Marxist appropriation of the aesthetic, shares characteristics with the ideological requisition described in relation with the fascist seizure of culture. These broadcasts entered the realm of pure fabrication because Hodges fleshed out the smallest detail for added impact: 'a carrot-topped boy with a cowlick (shameless ain't I) who retrieves the ball and holds it aloft [...] a souvenir baseball, a priceless thing somehow, a thing that seems to recapitulate the whole history of the game' (*U*: 26).

However, it is the wonder and spectacle of broadcasting 'real baseball' (*U*: 25), the awe of the live event, that Hodges yearns for, and as John N. Duvall has suggested, this leads him to miss a major detail, specifically that: 'he still performs the same order of simulation in his broadcast of the game even when he is present because he still must flesh out all the details for his listeners if the game is to rise above the level of mere facts and statistics'.²³ Hodges' emotive consideration of the historical import of the game works to demonstrate this continuation of a misleading or false aura through live radio commentary because for him, and his vast network of listeners, the import of this mid-

²³ John N. Duvall, 'Baseball as Aesthetic Ideology: Cold War History, Race, and DeLillo's *Pafko at the Wall*', *Modern Fiction Studies*, 41.2 (1995), 303.

century moment rests with the reverence of American sporting achievement, and not with the consequences of Cold War opposition:

Russ thinks this is another kind of history. He thinks they will carry something out of here that joins them all in a rare way, that binds them to a memory with protective power [...] Isn't it possible that this mid-century moment enters the skin more lastingly than the vast shaping strategies of eminent leaders, generals steely in their sunglasses—the mapped visions that pierce our dreams? Russ wants to believe a thing like this keeps us safe in some undetermined way. (*U*: 59-60)

The protective power Hodges senses in relation to baseball unites the masses in a false consciousness propagated by memories that maintain the aura of the mediated event. DeLillo is suggesting that the radio broadcasts framing this section of the narrative do not, in fact, bring the individual closer to the actual experience of the game, or the socio-political contexts surrounding it. Rather, they work to distance the individual from the Cold War military-industrial contexts informing its reproduction, and the resulting misleading aura of American cultural and political imperialism. Hodges' live broadcast, recorded and reproduced incidentally by an enthusiastic fan in an act that enabled the dissemination and replay of the radio call far beyond the actual event (DeLillo's precursor of the Zapruder footage of the Kennedy assassination), helps to propagate the simulations that replace the events of the day with alternative versions. These alternatives promote local sporting victory over national defeat, and transmit a crowd euphoria that effaces the danger of mass nuclear annihilation. Hence, this replication shows a specifically American requisite that the nation recreate the conditions of its virtuousness through sporting nostalgia. This deflects close critical examination of the links between military-industrial development, and the radio and recording technologies through which the majority of the population experienced the game.

Radio: Military Development and Propaganda

So far, we have analysed the false aura of the 'great American pastime' and DeLillo's recognition of the power of aesthetic representation to substitute public and private histories. However, in order to provide further critical purchase on this assessment of the text, it is important to look at the military deployment of radio as battlefield

communication device, and far-reaching propaganda machine targeting national and international audiences alike. DeLillo emphasises the fact that Hodges' radio commentary conveys a curious narrative of American pride and sporting equality that glosses over the injustices and conflicts of the 1950s, a false aura of national strength and unity. It is at this juncture that we may delineate DeLillo's treatment of the radio broadcasting with the tactics of psychological warfare designed to influence opinions, advance foreign policy interests and win favour both at home and abroad. Although not made explicit in the example of Hodges' sporting commentary, this being a clear illustration of DeLillo's use of representational gaps and a sign of the restrictions placed on overt propaganda in the domestic realm, the false aura of the radio broadcast in *Underworld* reflects the psychological and cultural contest taking shape as radio propaganda. However, before considering the Cold War ideological contexts planted by radio propaganda within domestic borders and beyond, we must first identify the military-technological origins facilitating radio's widespread distribution as a means of commercial broadcasting.

Initially not a military research initiative, wireless telegraphy, or radio was developed for maritime purposes prior to World War One. Radio frequencies permitted the transmission of telegraphic messages using Morse code between ships and land, and with the outbreak of war in 1914 this communication between land-based operators and vessels enabled the direct exchange of orders between armies and navies attempting to direct and maximise their strategic efforts. The entrance of the United States into the war effort in April 1917, brought about some important changes for radio usage and application, including the long-range detection of ships and aircraft via the use of radar, or 'Radio Detection and Ranging'. Radar proved to be a technological breakthrough for military operations because of its ability to locate enemy vessels at a distance by using radio waves to identify surface mass. The information generated from the polarisation and frequency of the return gave accurate details relating to the distance and surface of the object being pin-pointed. As a result of these early strategic military technological developments in communication and surveillance the widespread use of compact, portable transmitters transported by automobile became a reality and radio field units, such as the US Signal Corps, began to be deployed on the battlefield. Furthermore, US

wartime research efforts led to the introduction of two-way voice communication with aircraft, ultimately meaning that instantaneous orders could be conveyed to direct squadron formations with the same efficiency as ground infantry units. By the mid-century the majority of aircraft, both civilian and military, were well accustomed with the use of AM radio stations for navigational purposes and to this day AM stations are still marked on US aviation charts; thus demonstrating the developmental links between military technology and private enterprises and pastimes. However, as Thomas H. White has noted:

all amateur and commercial use of radio came to an abrupt halt on April 7, 1917, when with the entrance of the United States into World War One, most private US radio stations were ordered by the President to either shut down or be taken over by the government, and for the duration of the war it became illegal for private US citizens to even possess an operational radio transmitter or receiver. Radio in the US had become a government monopoly, reserved for the war effort.²⁴

At this stage the military had control over the entire US radio industry, meaning severe restrictions for amateur radio operators and enthusiasts, but at the same time, initiating the consolidation of the industry as a whole. As a result of this governmental regulation of private interests and research, by the end of the war, advances had been made with respect to vacuum tube equipment as an efficient form of detection and amplification. The manufacturers and engineers working on the development of vacuum tubes realised their potential usage in a wide variety of electrical applications; hence advancements in telecommunication were beginning to take shape. By the 1920s, once the wartime restrictions on amateur and commercial radio had been lifted, broadcasting began to become practical as a commercial enterprise due to the widespread introduction of reliable receivers, and with the resulting research and experimentation undertaken by the American Telephone and Telegraph Company (AT&T) on the distribution of telephone lines and transmitters, plans began to take shape for a national radio network. After a period of corporate wrangling, the implementation of this national broadcasting body took the shape of the National Broadcasting Company (NBC); therefore, the generation of commercial broadcasts including programming as varied as news, music, drama,

²⁴ Thomas H. White, 'Radio During World War One', *United States Early Radio History*, accessed via <http://earlyradiohistory.us/sec013.htm>.

comedy and variety shows, was seen to grow from radio technologies by the 1930s. From this point onward, radio became a key provider of news, entertainment and, therefore, propaganda. Commercial radio continued to develop throughout World War Two in terms of technological sophistication and dissemination, and accordingly it became a key method for transmitting political doctrine on both sides of the war. As Walter Benjamin was aware, radio and other news media would play a role in distributing the alarming potency of the Nazi parades and rallies during the 1930s onward, and the allied countries also maximised upon its communicational scope and persuasive potential. With heightened Soviet hostility post-1945, the Americans would continue to use radio as a tool for the propaganda message, both at home and overseas.

As Kenneth A. Osgood has stated, the Cold War was ‘an ideological, psychological, and cultural contest for hearts and minds. American policy makers increasingly realised that the Cold War could be won or lost on the plane of public opinion, rather than by blood shed on the battlefield’. Therefore, the United States was prepared to develop both overt and covert methods to ‘wage this battle for hearts and minds—both behind the Iron Curtain and within the free world.’²⁵ As a direct result of this realisation, the Central Intelligence Agency became directly involved in a programme of shortwave radio-broadcasting directed at Russia and other Eastern European countries under the grip of communism, beginning with ‘The Voice of America’ (VOA) in 1947, and strengthened by the launch of ‘Radio Free Europe’ (RFE) a supposedly ‘private organization’ provided with covert funding from the CIA, and ‘Radio Liberty’ (RL) which came into existence under the same rationale.²⁶ These stations were often staffed by exiled political leaders from the Soviet bloc, and intellectuals who were disillusioned with the practical application of communist ideology. These individuals were subject to certain limitations regarding artistic creativity and intellectual freedom because of the subsidies provided by the intelligence agency, and as James Critchlow, former media relations advisor for Radio Liberty, has highlighted, it was ‘clear that the CIA operatives who ran the programs saw themselves

²⁵ Kenneth A. Osgood, ‘Hearts and Minds: The Unconventional Cold War’, *Journal of Cold War Studies*, 4.2 (2002), 86.

²⁶ James Critchlow, ‘Western Cold War Broadcasting’, *Journal of Cold War Studies*, 1.3 (1999), 169.

as propagandists involved in a war of ideas'.²⁷ The overall objective of these stations was to create a deliberate covert gap in US containment strategy in order that a subversion of Soviet power would be initiated via the stimulation of public non-cooperation with Soviet-led communist regimes. According to Osgood, this covert counter-assault took the form of providing publicity for defections and escapes, inciting peasants to withhold the distribution of grain and playing music banned by the governments, such as Christmas carols and jazz.²⁸

While these covert initiatives were being funded and promoted overseas, the RFE and RL ventures also provided a smokescreen for high-level propaganda campaigns intended to generate support for US Cold War policy at home. Even though government agencies, particularly the CIA, were legally barred from overt psychological manipulation and propaganda practices in the domestic sphere, dozens of agencies such as the National Security Council, the State Department, the Department of Defense, and even the Departments of Labor and Agriculture and the Federal Civil Defense Administration, participated in Cold War propaganda campaigns directed at foreign audiences and American citizens equally.²⁹ One such example was the CIA's orchestration of the 'Crusade for Freedom', a massive fundraising initiative designed to encourage Cold War morale based upon the liberation of the 'incarcerated' peoples of Eastern Europe. Domestic propaganda was designed to win the 'hearts and minds' of American citizens by simultaneously inspiring sympathy for those subject to the Soviet regime, while at the same time promoting the moral legitimacy and united strength informing US Cold War ideology. It is no surprise, then, that DeLillo's reconstruction of the radio broadcasting taking place during the Giants versus Dodgers game conveys an aura of national pride, success and exceptionalism that erodes the nuclear subtext. With such covert efforts of psychological persuasion taking place within national borders it is not difficult to acknowledge the sporting broadcast within a wider programme of influence taking multiple technological and aesthetic forms.

The military-industrial framework directing and facilitating the misleading aura of Hodges' radio broadcast also impacts on the cultural experience of the game as a

²⁷ Ibid., 102.

²⁸ Osgood, 'Hearts and Minds', 93.

²⁹ Ibid., 87.

conduit for Cold War containment. In the box seats, J. Edgar Hoover, Frank Sinatra, celebrity bartender Toots Shor and Jackie Gleason have congregated together to watch the game. Not only does DeLillo fictionalise and reproduce the aura of a real sporting event, but he also characterises these real-life figures in what can be seen as the simultaneous creation of irony and nostalgia. The aesthetic and ideological potency centres on DeLillo's characterisation of Hoover, when an FBI agent brings him the news that the Soviet Union has successfully detonated a second atomic bomb:

It seems the Soviet Union has conducted an atomic test at a secret location somewhere inside its own borders. They have exploded a bomb in plain unpretending language. And our detection devices indicate this is clearly what it is—it is a bomb, a weapon, it is an instrument of conflict, it produces heat and blast and shock. It is not some peaceful use of atomic energy with home-heating applications. It is a red bomb that spouts a great white cloud like some thunder god of ancient Eurasia.

Edgar fixes the date in his mind. October 3, 1951. He registers the date. He stamps the date. (*U*: 23)

In this sense, Thomson's 'shot heard round the world' occurs in the media at the same time as the Soviets' nuclear achievement, a linguistic 'explosion' tying the events together. The clarification of the bomb as a 'weapon', and an 'instrument of conflict' in contrast with atomic energy used for 'home heating appliances' demonstrates the immediacy of the threat, and ties domestic experience with military hardware. As Hoover's recognition of their historical import implies, this critical moment proved vital for substantiating the legitimacy of US anti-communist policy and strategies of containment. The detonation of the bomb, conveyed in 'plain and unpretending language, and yet described here with a spiritual potency comparable with Virilio's 'machine-god' and DeLillo's own thoughts on the status of the bomb as spiritual god of technology, confirmed Russian nuclear capability. This signified a substantial enough shock to justify heightened domestic paranoia about the threat to American supremacy and national security. However, as already highlighted, in the context of the home run, the Russian atomic blast is subject to evaporation from Cold War American consciousness. With the help of the accompanying radio broadcasting of the game, and the resulting newspaper headlines conveying the Giants triumph in tandem with the Soviets' success, the political urgency of the moment competes with the aesthetic power of national sporting victory and defeat. The description of the home run as 'the shot

heard round the world' further emphasises this irony by demonstrating the parochialism enabling the baseball game to eclipse the atomic test as supposed global news event. Hoover concentrates his attentions on the shower of ripped up paper, ticket stubs and trash falling from the stands. As he brushes away the debris, a page ripped from *Life* magazine catches his eye due to its graphic and horrifying nature. It is a colour reproduction of the Pieter Bruegel painting 'The Triumph of Death', the source of the prologue's title, which becomes an object of scrutiny for Hoover while Thomson makes the home run:

Across the red-brown earth, skeleton armies on the march. Men impaled on lances, hung from gibbets, drawn on spoked wheels fixed to the tops of bare trees, bodies open to the crows [...] It is clear to Edgar that the page is from *Life* and he tries to work up an anger, he asks himself why a magazine called *Life* would want to reproduce a painting of such lurid and dreadful dimensions. But he can't take his eyes off the page. (*U*: 41)

The moment of the Giants' victory seems to merge with Hoover's sickened fascination with the reproduced painting as the images of mass death, torture and destruction are fused with the surge of the crowd in a figuration of nuclear destruction taking on biblical proportions: 'The meatblood colors and massed bodies, this is a census-taking of awful ways to die [...] and he thinks of a lonely tower standing on the Kazakh Test Site, the tower armed with the bomb' (*C*: 50). The sixteenth-century painting, significant not only for its visual devastation, but also for its status as a magazine print replicated for a mass audience, further highlights the false aura of containment aiming to promote national parochialism in the face of external Cold War opposition and nuclear success. Although the painting has been infinitely reproduced and disseminated to the masses in a way that challenges its aura of authenticity, Hoover's contemplation reveals its reconstruction in the form of an aura of political conflict that aestheticises the 'Us and Them' binary directing the tactics of the nuclear war game. The skeleton armies and scenes of torture and death depicted in the reproduced painting convey a Cold War vision that, on a personal level, justifies Hoover's almost tyrannical position at the centre of national security and containment, while also providing an ideological validation for the American military-techno-scientific response to the Russian nuclear achievement.

At this point, Hoover is alone with these fevered visions of nuclear apocalypse, because reports of the Soviet tests have not yet reached the public domain. However, the rest of the crowd will internalise the same ideology of national competition as it is aestheticised by the aura engulfing the ball game. Each narrative perspective converges at this moment of mass commotion. This is not simply a consequence of the home run victory, but an indication of the presiding system connecting radio technology with the potential for nuclear destruction. In this sense, the radio innovation responsible for immortalising the Giants' victory is inextricably tied to nuclear weapons development. This is a correlation DeLillo makes explicit with the simultaneity of the Soviet testing, but also implicit in the military-technological trajectory providing a developmental subtext for the novel in its entirety.

These early technological developments in radio provided the basis for more recent communication innovations with dual military and commercial benefits, including wireless networks, mobile communications of all kinds and global positioning satellites (GPS) to name but a few. In the context of DeLillo's fictionalisation of a techno-scientific route toward a war of knowledge, I shall investigate the relationship between examples of these communication technologies, and the overriding military-technological drive making possible their application as commercial systems. According to DeLillo's fragmented version of the Cold War, political ideology is inextricably fused with these forces of technological reproduction, and it is this merger that facilitates the circulation of a false aura of dominant Cold War opposition in American culture. Rather than set the representational power of multimedia flows against that of narrative, DeLillo uses them as a means to review the last half-century of Cold War history in the same mediated and fragmentary way that it has been experienced. Although the military-industrial framework informing and advancing radio communications, is not subject to the same level of military precision and speed, nor is it capable of the instant generation of parallel virtual realities described by Virilio in his assessment of networked computer innovations, it is possible to see how the mass distribution of radio technology and its resulting subtext of American hegemony initiated a developmental trajectory toward the all-encompassing war of information. At this juncture, then, I will consider the military-

technological framework enabling two other twentieth-century giants of media communication: television and satellite.

Television and Satellite: The Image War

There is a struggle, which I tried to bring to light, between metabolic speed, the speed of the living, and technological speed, the speed of death which already exists in cars, telephones, the media, missiles, [...] video is a weapon that takes over consciousness itself.³⁰

For Paul Virilio, the 'pure war' of technological deterrence is a process of scientific and technological preparation imposing a permanent war economy through the development of increasingly sophisticated arms. This process leads to a state of societal non-development, the subordination of consciousness to audio-visual mediums and the eventual devaluation of the human body in favour of electronic systems. As a consequence of this cycle of permanent military-industrial preparation, a large percentage of technologies are derived directly from the machinery of war and as Virilio notes this intimacy is 'hard for people to accept'.³¹ This refusal of the military-technological infiltration leads Virilio to consider the loss of conscious totality to what he calls an: 'infinity of little deaths' in audio-visual experience.³² Although societal discomfort with a military-industrial economy causes a degree of fragmentation in terms of political consciousness, for Virilio, the central cause of these symptoms is the development of a trans-political system that brings about a 'disappearance' of the commodity of time. Technological ascendancy leads to an increase in speed, the speed of delivery and dissemination in both war scenarios and everyday social interaction that destroys traditional concepts of duration. In this sense, metabolic speed, 'the speed of the living' merges with technological speed, 'the speed of death' in the creation of weapons systems and the development of news media networks that lead to a 'montage of temporalities which are the product not only of the powers that be, but of the technologies that organize time'.³³ Increased technological speed, then, instigates the

³⁰ Virilio, *Pure War*, 140.

³¹ *Ibid.*, 24.

³² *Ibid.*, 34.

³³ *Ibid.*, 34.

fragmentation of the 'great narrative' of total war in favour of the trans-historical, trans-political inter-state conflict; infinite, small scale skirmishes that epitomise this movement toward the age of micro-narratives and the fragmentation of historical reality. For Virilio, warfare has become a series of interruptions, or breaks because the historical framework within which they reside has become a temporal composite dictated by technological velocity. The overall result of this temporal montage is the loss of unified consciousness to a collage of technologically inscribed realities supporting the network of fragments constituting the trans-political regime: Our consciousness is an effect of montage. There is no continuous consciousness, there are only compositions of consciousness and these compositions are voluntary and involuntary.³⁴ Cinematic and television metaphor plays an important role in Virilio's concept of consciousness because it highlights our experience of 'reality' as a collage or montage interspersed with breaks and cuts that divorce the subject even further from a unified map of the social, political and historical. Accordingly, video and its associated technologies (television and satellite) are described as means of taking over consciousness completely because they convey and propagate the technological interruption detaching the subject from the totality of the 'great' narrative. This audio-visual fragmentation is pertinent to this inquiry into the sub-textual agenda of *Underworld*, because DeLillo's novel reflects the montage effect altering our consciousness. Furthermore, the breaks and cuts deliberately interspersed throughout the historical mapping of the narrative exemplify this loss of totality to the 'micro-narrative'. The consequence of this loss of totality in terms of the structure of the novel is the displacement of authoritative and absolute narrative voices by the technological mediums through which we construct and experience the world around us.

According to Virilio 'Every technology produces, provokes, program[mes] a specific accident' because the enhanced speed facilitated by technological innovation creates a kind of violence detached from the significance of the event.³⁵ The phenomena of representation via audio-visual mediums upholds this dislocation, these 'accidents' or 'interruptions' by reproducing the ephemeral, unstable quality divorcing the subject

³⁴ Ibid., 35.

³⁵ Ibid., 32.

from constant and steady perception. In this sense, the world takes on a cinematic quality of transient and volatile reflections that enable technological speed to reduce physical space and de-territorialize borders with a 'tyranny' of movement:

What happens in the train window, in the car windshield, in the television screen is the same kind of cinematism. We have gone from the aesthetics of appearance, stable forms, to the aesthetics of disappearance, unstable forms.³⁶

Audio-visual representation, then, becomes a major factor in this aesthetics of disappearance. The unstable and momentary images conveyed via the television screen lead to a form of disappearance because they have become fragmented from the political and historical contexts shaping them. In this sense, media technology propagates the trans-political, trans-historical system identified by Virilio in relation to the break-up of traditional warfare, but it is also a direct by-product of the escalation of weapons development responsible for this dislocation in the first place. Battlefield operations technologies based on video-screen surveillance and satellite positioning, share their developmental origins with the television and video technologies broadcasting fragmented warfare into our homes. Therefore, mass media representation not only disseminates, but is also immersed within the military-industrial framework disintegrating consciousness and programming the infinite breaks or 'accidents' that deny any sense of 'manageable reality'.³⁷ DeLillo aligns this loss of manageable and cohesive reality with a specific moment of national crisis and historical dislocation: the Kennedy assassination.

To understand DeLillo's televised representation of the Kennedy assassination as a fragment of the dislocated cultural condition caused by military-technological expansion, we must consider some of the technological advancements framing the event, and facilitating its speed, synchronicity and circulation. As previously mentioned in Chapter Two, American Cold War military-technological expansionism had begun to take on a new form and urgency by 1957 with the shocking news that the Soviet Union had launched Sputnik, the first satellite. This Soviet success was swiftly followed by the

³⁶ Ibid., 84.

³⁷ DeLillo's interview with Anthony DeCurtis, 'An Outsider in This Society' in Lentricchia, *Introducing Don DeLillo*, 48.

launch of Sputnik II in November of the same year. The first steps toward US military-technological acceleration would include passing the National Aeronautics and Space Act on April 5th 1958, and the subsequent formation of the National Aeronautics and Space Administration more commonly known as NASA. The creation of this Department of Defense subsidiary secured an increase in funding for the space programme, in conjunction with government endorsed media attention for its catalogue of accomplishments. The space race, then, beginning with the satellite development that would improve the speed and efficiency of communication technologies, including television, would become another conduit for the expression of American supremacy. As Jodi Dean has noted, this symbolic assertion of achievement was designed for public consumption, both nationally and internationally, via the mass media networks consequently benefiting from the military-technological initiative. Therefore, the Cold War US space program would become synonymous with a 'general theatrics of space' designed to win public approval with serialised television representation:

Itself a product of the Cold War, the space program was part of a general theatrics of space in which the roles of hero and scientist, citizen and witness were enacted. In the sixties and seventies, outer space and the US ability to conquer it appeared as a serialized account of American power and success. Technology would win the Cold War and the ratings war as it proved the superiority of the American democratic experiment.³⁸

The 'theatrics of space' that Dean refers to reminds us of DeLillo's account of the sense of performance experienced in relation to the televised footage of the Kennedy assassination. In this case, government agency representatives, scientists and the general public take on the archetypal roles of 'hero' and 'witness' in a 'serialized' version of Cold War history. Technological success may have secured US superiority through increased media visibility and synchronicity, but as DeLillo has repeatedly highlighted, this technological efficiency has caused the overall decline of conscious totality and 'manageable reality'. Therefore, the 'serialized accounts of American power and success' observed by Dean secure cultural purchase with a global audience exposed to televised versions conveying the 'art' of the trans-historical, or postmodern, fragment.

³⁸ Jodi Dean, *Aliens in America: Conspiracy Cultures From Outerspace to Cyberspace*, (Ithaca: Cornell University Press, 1998), 11.

The space race, saturated with symbolic nationalism, became a key aspect of the battle for 'hearts and minds' at the centre of all Cold War competition. Consequently, this channel for propaganda was recognised and promoted during John F. Kennedy's 1960 Presidential campaign with the slogan 'A New Frontier'. Accordingly, the Kennedy administration pledged a commitment to increased funding of the space program, including a ten million dollar raise in the satellite communication program by March 1961.³⁹ Kennedy's military-technological escalation was also responsible for the push toward a manned lunar landing, and the increasing regularity of space expeditions during the decade. From hereon, these economic and research commitments would have a two-fold effect in terms of military and civilian technological development.

First, the practical application of satellite communications would impact upon battlefield reconnaissance, a development deemed crucial after the heightened hostilities of the Cuban Missile Crisis in 1962. Second, it provided more efficient channels for civilian global communication, an acceleration that worked to fuse, blend and obscure the military and civilian spheres both in terms of technological research origins and cultural impact. Although US military and civilian space programs were separated organisationally, the functions performed by satellites, and the vehicles used to launch them were virtually identical. Both sectors have based their interest on communications, navigation, remote sensing and reconnaissance with little differentiation in terms of capability and frequency.⁴⁰ This blurring of the boundary between civilian and military satellite applications caused a series of policy debates during the early 1960s, deliberations that questioned whether military and civilian communication systems should be separate or combined. By 1962, the Initial Defense Communication Satellite Program (IDCSP) had been established, with seven satellite systems being launched over the next four years. The difference between this programme and earlier research initiatives was the operational capability of the technology being deployed. The emphasis had moved away from experimental systems, to fully fledged reconnaissance and tactical communication satellites that by the mid-1960s were being used in Vietnam.

³⁹ Hugh Richard Slotten, 'Satellite Communications, Globalization and the Cold War, *Technology and Culture*, 43.2 (2002), 332.

⁴⁰ See Patricia M. Figliola, *US Military Space Programs: An Overview of Appropriations and Current Issues*, (Washington DC: Library of Congress Research Service, August 7, 2006), accessed via <http://www.fas.org/sgp/crs/space/RL33601.pdf>.

Despite earlier debates about the implications of developing military and civilian systems simultaneously, these links remained with battlefield survey innovations advancing in conjunction with improvements in the telephone and broadcasting technologies, progress that Hugh Richard Sloten has described as possible means for 'global communication, education and propaganda'.⁴¹

This simultaneous expansion was helped along by a decision by the Kennedy administration to establish a satellite communications system open to all the countries of the world. This policy reversed the Eisenhower administration's plan to treat satellite communications as an extension of existing private telecommunications enterprises such as AT&T. Rather than endorse corporate communication routes, the administration proposed to create a single world system in what was effectively an extension of the communication battle for 'hearts and minds' initiated with radio propaganda after World War Two. The competition with the Soviet Union for military superiority, technological prestige and 'ratings' popularity provided the motivation for this global system, and the Communications Satellite Act of 1962 ensured that the US could wage a propaganda battle to facilitate this success. The same year a unique company called Comsat was created to administer the first global satellite system, Intelsat. As Hugh Richard Sloten has observed, the most prominent application of the new technology was international television broadcasting, a development that enabled the 'synchronicity' and immediacy of media representation. As mentioned earlier, Jameson and Virilio see this as indicative of the postmodern, conditions aiding American global domination and colonisation through the commodification of information. For Sloten, the satellite technology advancing global television broadcasting was vital to the transmission of US dominance over this new 'global village'.⁴² The technologies central to the US space program provided a foundation for more efficient television broadcasting, while television, in turn, engendered international support for the space program and therefore US Cold War superiority:

⁴¹ Sloten, 'Satellite Communications, Globalization and the Cold War', 315.

⁴² See Marshall McLuhan, *Understanding Media: The Extensions of Man*, (London: Routledge, 1964), 378 pp.

The major TV event of the 1960s, the 1969 Apollo moon landing, observed by five hundred million people in forty-nine countries thanks to the Intelsat system, symbolized not only the primary role of the US in the new global village, but also the central role of the space program in the process of globalization.⁴³

In this sense, a strange kind of irony can be attributed to the Kennedy administration's dedication to a global satellite system enhancing the speed and diversity of telecommunications and broadcasting. This is because it is part of the same military-industrial system held responsible for the historical deterioration of the Kennedy assassination into a technological 'interruption' or postmodern representational void.

The cultural impact of satellite communication technologies and propositions for space exploration played no small part, then, in affirming US Cold War primacy. The frequency of televised shuttle launches during the 1960s and 1970s ensured that the collective power of these images was exploited so that the space race would benefit from the mass media consolidation it had helped to stimulate. Jodi Dean has stated in response to this partnership that: 'the space program was always in part a television program produced for audiences at home and abroad. If it wasn't public, a spaceflight didn't happen'.⁴⁴ The 'theatrics of space' played out for a television audience had become an indicator of postmodernism, a sign of historical 'performance' over substance caused by increased technological speed and enhanced geopolitical reach. It is exactly this set of military-technological conditions that have triggered observations like those of William D. Atwill about the American space program as postmodern narrative:

The space program had already become what we call postmodern. The rise of television as a global force was linked to the space program's ability to orbit geosynchronous relay satellites, and, just as the astronauts were almost never out of contact with ground control, no writer living through these times could avoid the media saturation of the launches.⁴⁵

Atwill's comments on the media saturation of the space program work to reiterate how DeLillo's narrative in *Underworld* is submerged within the fragmented culture resulting from the 'geosynchronous relay' and speed of military technological innovations. To a

⁴³ Ibid., 349.

⁴⁴ Dean, *Aliens in America*, 74.

⁴⁵ William D. Atwill, *The American Space Program as Postmodern Narrative*, (Athens, Georgia: University of Georgia Press, 1994), 11-12.

certain extent, the novel is a stylistic reflection of this condition, a product of the media saturation and loss of historical grounding encouraged by enhanced communications. However, by pointing to a military-technological subtext linking the developmental origins of military and civilian innovation, DeLillo imparts to the reader the diagnostic tools required to recognise the cultural impact of this complication. The recurring resonance of the Kennedy assassination in DeLillo's fiction, then, expounds this complication in the media degeneration of the event.

The Kennedy Assassination as Historical 'Interruption'

For DeLillo, the major point of crisis signalling this fragmentation of cohesive reality to networked simulation occurred in Dallas in November 1963, when television networks across the globe broadcast news of the assassination of President John F. Kennedy. Prior to the visceral spectacle of this brutal event, American collective identity obtained affirmation from the political conflicts and crises of the Cold War, particularly in terms of the nuclear anxiety and paranoia maintained through policies of containment. As Peter Knight has stated, 'in comparison with the insecure paranoia that DeLillo presents as an effect of the Kennedy assassination, the secure paranoia of the Cold War years takes on a comforting solidity'.⁴⁶ The differentiation between a 'secure' sense of paranoia based around Cold War binary oppositions and external threats, and 'insecure' paranoia invading the sacred space of national borders, both psychological and physical, is conveyed in *Underworld* through the characters' nostalgic longing for the certainties of 'Us and Them' hostility. Minor character Marvin Lundy, the baseball collector who puts all his energies into tracking down the ball from the 1951 Giants versus Dodgers game, when talking to Nick Shay's colleague Brain Glassic, recognises this yearning for tangible Cold War anxiety as a dependable fear on which to base assertions about personal and collective perception:

⁴⁶ Peter Knight, 'Everything is Connected: Underworld's Secret History of Paranoia, *Modern Fiction Studies*, 45.3 (1999), 816.

the Cold War is your friend. It's the one constant thing. It's honest, it's dependable. Because when the tension and the rivalry come to an end, that's when your worst nightmares begin. All the power and the intimidation of the state will seep out of your personal bloodstream. (*U*: 170)

Without strict assertions about Cold War enmity, subjects in the novel become exposed to the breaks and cuts that negate stable consciousness and historical reality; thus the paradoxical comfort of 'secure' Cold War unconscious becomes undermined by the unstable, intangible and fragmentary paranoia of the trans-historical, postmodern age. DeLillo's often quoted fictional observations that the assassination was 'the seven seconds that broke the back of the American century', and an 'aberration in the heartland of the real' further highlight how the distant and therefore 'secure' threat emanating from the Soviet 'other' was darkened by the death of the President.⁴⁷ This was an act of technological violence taking place within the national perimeter; therefore compromising the symbolic potency of American authority and Cold War invulnerability.

In an interview with Anthony DeCurtis, DeLillo declared that to an extent the assassination 'invented' him, and that when it happened he 'was not a fully formed writer'.⁴⁸ Therefore, the 'visceral shock' surrounding the assassination and the 'dark culture' resulting from it provided a sub-textual basis for his first eight novels. These tendencies would come to the fore in *Libra* (1988), his fictional investigation into the heart of the event, and the resulting interconnected avenues of historical causality generating a multitude of conspiracy theories about it. In this sense, *Libra* presents us with the symptoms of a society troubled by competing versions of reality, such as an awareness of: 'elements like randomness and ambiguity and chaos' in opposition with the conspiratorial view that: beyond this confusion of data, people have developed a sense that history has been secretly manipulated'.⁴⁹ As Frank Lentricchia has suggested, DeLillo 'offers us no myth of political virginity preserved, no individuals who are not expressions of—and responses to—specific historical processes', and this has led to his literary 'refusal of the opposition of the personal and the public altogether'.⁵⁰

⁴⁷ Don DeLillo, *Libra*, (London: Penguin, 1988), 17.

⁴⁸ DeLillo's interview with Anthony DeCurtis in Lentricchia, *Introducing Don DeLillo*, 47.

⁴⁹ *Ibid.*, 48.

⁵⁰ *Ibid.*, 4.

Subsequently, *Washington Post* columnist, George Will condemned DeLillo's critical assessment of public sector history in *Libra* as 'literary vandalism', and claimed that the author was a 'bad citizen' and a 'bad influence' for entertaining the possibility that the Kennedy assassination was the product of a conspiracy as opposed to the act of a 'lone gunman'.⁵¹

In response to this accusation of 'literary vandalism', DeLillo describes his fictionalisation of the assassination as a 'way of thinking' about an event engulfed in the competing yet intertwined histories of chaos and contingency that propagate a 'chronicle of unknowing'. The novel is submitted as an alternative to this fragmentation of historical foundations by imparting what DeLillo describes as a 'third line'.⁵² This is the line between the 'facts' and official secrets embodied within the Warren Commission's lengthy investigation, and the simultaneous generation of paranoid speculations undermining the findings of the Warren Commission Report. *Libra* is built around these rival views of historical causality, with aspects of the Warren Commission findings presented next to several conspiracy theories of the assassination. These are presented to the reader via the characterisation of Lee Harvey Oswald and other individuals relating to the event. Yet, despite DeLillo's assertion that the novel may operate to 'rescue history' from its confusions' and fill in the 'blank spaces' left in the historical record, ultimately the novel does not support or justify either school of interpretation, but rather emphasises the breaks and gaps, or as Skip Willman suggests the 'moment of untruth, the blind spot that enables each narrative to restore meaning and/or stability to social reality following this traumatic event'.⁵³ In this sense, it is the confusions, secrecy and unknowing surrounding the narrative accounts of the assassination that offer solace to those seeking a stable social order by way of a political unconscious. Social reality in DeLillo's texts is irreversibly fragmented so that the alternative, or 'third line' offered by this novel is not a truth-claim but a rendering of the discrepancies and contradictions that form and structure our social experience. Rather than present literal truth through fiction, then, *Libra* offers 'refuge' in the way that it refutes the contradictions in these accounts. It exposes their breaks and distortions and challenges the competing theories

⁵¹ Quoted in *Ibid.*, 3.

⁵² DeLillo, *Libra*, 339.

⁵³ Skip Willman, 'Art after Dealey Plaza: DeLillo's *Libra*', *Modern Fiction Studies*, 45.3(1999), 623.

of chaos and conspiracy with recognition of our desire for settlement, totality and closure. The novel does not provide us with greater clarity on the event, but articulates how the 'secrets within systems' remain encoded in order to preserve the cultural purchase of 'political bias' and 'systematic fantasy'.⁵⁴

As previously mentioned, the murder of John F. Kennedy casts its shadow over *Underworld* in terms of the way it marks nostalgia for the 'secure' paranoia of Cold War opposition and conspiracy prior to this watershed event. The assassination appears in the text as a secret screening of the Zapruder footage, a chance amateur recording capturing the moment of the shooting. During the 1970s, a select group of the underground New York art scene congregate to watch infinitely looped versions of the bootlegged recording. Incidentally, this was footage otherwise withheld from the general American public at that time. The audience experience a curious mixture of responses to this visual bombardment, including initial shock: 'it was completely new you see, suppressed all these years, this was the famous headshot and they had to contend with the impact' (*U*: 488), combined with a converse sense of pessimism and disillusion resulting from viewing the assassination as a chain of ceaseless technological replications increasingly detached from their historical context:

On a large console the screen was split four ways and the headshot ran in every sector and [...] here was an event that took place at the beginning of the sixties, seen belatedly, that now marked the conceptual end, carrying all the delirium that floated through the age, and people stood around and talked, a man and woman made out in a closet with the door open, remotely, and the pot fumes grew stronger, and people said, "Let's go eat," or whatever people say when a thing begins to be over. (*U*: 496)

Experienced as televised serial playback, and described here in the past tense thus further emphasising 'the conceptual end', the Zapruder film has lost its cultural potency and historical clarity. It has degenerated into the routine technological banalisation of a violent event. The technology capturing the 'headshot' may have facilitated official analyses, and a multiplicity of theories about the number and angle of shots fired, but for this audience it has become a series of images fragmented from any frame of reference. The sense of anti-climax and indifference conveyed here may indicate the loss of an age of Cold War American innocence to the disillusionment of a society contending with the

⁵⁴ DeLillo, *Libra*, 15.

strain of the Vietnam War and the Watergate scandal. However, underlying this it highlights the overall loss of 'meaningful reality' to a military-technological motion underpinning all these aspects of social organisation and comprehension. Klara Sax, the celebrated artist and former lover of Nick Shay, is present at the screening, and she recognises simplicity in the home movie footage of the Presidential motorcade:

She knew she'd hear [...] at dinner about the secret manipulation of history, or attempts at such, or how the experts could not seem to produce a clear print of the movie, or whatever. But the movie in fact was powerfully open, it was glary and artless and completely steeped in being what it was, in being film. (*U*: 495)

Klara's observations about the transparency of this footage as an 'artless' and 'powerfully open' film excerpt, further emphasises how the contingency and conspiracy theories ordering social reality in *Libra* have disintegrated in *Underworld*. This leaves the Zapruder screening devoid of the explanatory closure indicative of the 'great narrative'. The footage has become pure image and technological death that 'seemed to rise from the streamy debris of the deep mind [...] some trick of film emulsion that showed the ghost of consciousness' (*U*: 496). Rather than find solace and meaning in the 'secret manipulation of history' that DeLillo had exposed in *Libra*, Klara is left to view the serial repetition of these images as if they were exhibits in the televised 'museum of accidents' described by Paul Virilio as fundamental to the fragmentation of social reality: 'television exposes the world to the accident. The world is exposed to accidents through television [...] television is a media of crisis, which means that television is a media of accidents. Television can only destroy'.⁵⁵ In fact, DeLillo describes Klara's view of the underground screening in strikingly similar terms:

The footage kept repeating and they walked around, they stirred from their corners and visited the other rooms or stood in front of the TV wall. They were like tourists walking through the rooms of some small private collection, the Zapruder Museum, one permanent display, the twenty-some-odd seconds of a home movie, and it runs continuously.

⁵⁵ Virilio's interview with Louise Wilson, 'Cyberwar, God and Television', accessed via www.ctheory.net.

The televised footage Klara passively watches is typical of Virilio's 'media of accidents' because it is stripped of perspective to the point where it becomes pure and impenetrable image. This condition transmits and reproduces 'the accident' because technological death, typified by the 'breaks', 'cuts' and interruptions jeopardising conscious totality, separate the subject from the circumstances of the violent event. This in turn causes a condition of self-reflective consumption. Klara and the rest of the audience note a distance from the images they are consuming like 'tourists' in the 'Zapruder Museum', and rather than identify the cultural and political potency of the film, they consider the technological horror of the headshot as a piece of 'lethal engineering [...] sheering through [the] tissue and braincase' of any 'human head' as a 'terrible revelation' (*U*: 489). Historical recognition of the President's murder has given way to a morbid fascination with the spectacle, a fascination that confirms the characters' mortality, but also causes confusion and indifference because the fragment of film conveys the 'ghost of consciousness' rather than a meaningful totality.

For Klara, this late-capitalist-military-technological condition of discontinuity has led to nostalgia for the apparent stability and security of the paranoid narratives of the Cold War. Although she recognises the potency of Cold War terror, Klara, like Marvin Lundy the baseball collector, understands the constancy and dependability of all-pervading binary conflict. Following a similar line of inquiry, Brian Glassic, Nick Shay's waste management colleague, understands the Kennedy assassination as the turning-point in this Cold War unconscious. He sees it as the defining moment when the comfort of the meta-narrative disintegrated to reveal the inconstancy and division of the military-technological system beneath. Glassic contrasts the national pride and collective energy surrounding Thomson's home run in the 1951 Giants versus Dodgers game with the converse emotions caused by the news of the President's murder:

When JFK was shot, people went inside. We watched TV in dark rooms and talked on the phone with friends and relatives. We were all separate and alone. But when Thomson hit the homer, people rushed outside. People wanted to be together. Maybe it was the last time people spontaneously went out of their houses for something. (*U*: 94)

The Kennedy assassination, then, was the true 'shot heard around the world' and its technological immediacy instigated a disintegration and dispersal, not only of meaningful reality, but of collective identity and communal reassurance. The assassination caused the death of a President, but it also represented a secondary technological death as news of the 'headshot' spread globally via channels of communication. Thus, the shock of the event was replicated, destroying the collective potency of narratives of national strength and impenetrability.

Fredric Jameson also recognises the assassination as a formative event, not because of its political ramifications or any sense of national tragedy, but because the nation was tied together for the first time by the immediacy and 'synchronicity' of the televised event: 'Television showed what it could really do and what it really meant—a prodigious new display of synchronicity and a communicational situation that amounted to a dialectical leap over anything hitherto suspected'.⁵⁶ For Jameson, then, the televised news of the assassination seemed to usher in the symptoms of postmodernism; with audio-visual mediums becoming characteristic of a social condition of communicational instantaneity, surface imagery and historical disorientation. In the early 1960s, for the first time, virtually every American household had access to a television set. This was a development made possible by, and immersed within, the military-industrial complex that Jameson sees as responsible for an under-history of 'blood, torture, death and terror'.⁵⁷ This under-history can be explained in terms of the warfare state, a conjunction of military-industrial relations, fed by billions of US dollars in a bid to ensure national security through absolute military power. As far as journalist Fred J. Cook is concerned, the warfare state works on the false assumption that national prosperity depends upon the linkages between the domestic economy and military expenditure.⁵⁸ The inclusion of the domestic within the military-industrial complex transpires with private manufacturing companies vying for military contracts, and US civilians working on the design and production of military hardware. In this sense, the domestic economy becomes increasingly dependant upon military concerns, and vice versa. Domestic technologies, such as television, then, become networked into the military-industrial

⁵⁶ Jameson, *Postmodernism*, 355.

⁵⁷ *Ibid.*, 5.

⁵⁸ See Fred J. Cook, *The Warfare State*, (New York: Macmillan, 1962), 376pp.

complex through economic association and are inherent within the overall military escalation. *Underworld* places the televised replication of the assassination within a Cold War historical framework both preceding and following the sense of personal and collective crisis generated by it. Therefore, it can be plotted into the military-industrial subtext underpinning the novel's trajectory toward the contemporary information war. Whereas *Libra* provided a 'third line' of fictional inquiry into the assassination intended to counter the agency of competing realities, *Underworld* focuses upon the event as technological death and televised spectacle. These are visual representations designed for unremitting repetition in a society no longer ordered by the totality of explanatory narratives.

Since *Libra*, DeLillo has considered the technological properties of his writing, specifically how his narratives intertwine with and reflect mass media information flows in order to challenge their cultural power. In a statement sharing similarities with Jameson's discussion of the televised event, DeLillo identifies a specific response to the violence of the assassination, a sense of 'performance' that enables us to consume televised representations of the traumatic event, and yet fail to understand their complete significance:

The power of television was utilized to its fullest, perhaps for the first time, as it pertained to a violent event. Not only a violent event, but, of course an extraordinary significant event. This has become part of our consciousness. We've developed a sense of performance as it applies to televised events.⁵⁹

This 'performance' is another indicator of the weakening of social and historical reality. It is another symptom of the 'synchronicity' and speed of unrelenting television images as they are detached from their origins by the 'sheer mechanical technique' of replication.⁶⁰ Subsequently, *Underworld* reveals a kind of social malaise resulting from this loss of critical context in the sections focusing on the media playbacks of the 'Texas Highway Killing', the televised images of a serial shooting during the 1980s. A network news channel repeatedly plays the footage of a random killing on the highway, coincidental footage mirroring the Zapruder film, recorded by a twelve-year-old girl

⁵⁹ DeLillo's interview with Anthony DeCurtis, 'An Outsider in this Society' in Lentricchia, *Introducing Don DeLillo*, 48.

⁶⁰ Jameson, *Postmodernism*, 355.

playing with a video camera in the back of a passing car. The television audience consuming the footage have, to a certain extent, become implicated in the replication of the crime. They absorb and replay the violent spectacle as a form of entertainment inspiring equal fascination and dread. The killer in question, identified as Richard Henry Gilkey, embarks on a killing spree inspired by the immediacy of the news media resulting from the video recording. Therefore, the television audience watching the crime as performance take on second-person culpability for his actions:

This is a crime designed for random taping and immediate playing. You sit there and wonder if this kind of crime became more possible when the means of taping an event and playing it immediately, without a neutral interval, a balancing space and time, became widely available. Taping-and-playing intensifies and compresses the event. It dangles a need to do it again. (*U*: 159)

This social malaise begins in the novel with the underground screening of the Zapruder film which reduces the horror of the assassination to performance. By the time of the Texas highway killing, this aesthetic condition has mutated further into a kind of postmodern serial (killing) voyeurism, made possible by the advanced recording technologies capturing the event and ‘intensifying’ it with temporal compression. As a result of this, there is no longer a ‘neutral interval’, a ‘balancing space and time’ to contextualise images and information. As Jeremy Green suggests, the energy of the event becomes submerged within the video technology able to replicate it, and this capability insinuates an unsettling relationship between the viewers and the viewed based around the power of televised death to simultaneously shock and relieve the masses.⁶¹ Gilkey’s inclusion in the novel reveals how the energies of the Cold War collective identity have mutated to find expression in mass mediated violence and postmodern consumer flows. Since the postmodern meltdown of the Kennedy assassination, these have become the type of events that stand for collective experience: hyper-visible displays of technologically transmitted violence and death. Without the reassurance of Cold War organising principles and boundaries, and subject to the dislocations of a technologically mediated reality, the television audience convenes around what Mark Seltzer describes as ‘the milling around the point of impact [...] the

⁶¹ Jeremy Green, ‘Disaster Footage: Spectacles of Violence in DeLillo’s Fiction’, *Modern Fiction Studies*, 45.3, (1999), 572.

public fascination with torn open bodies and torn opened persons, a collective gathering around shock trauma, and the wound'.⁶² Prefigured in the Zapruder footage of the assassination, this fascination with the 'point of impact' is a misguided collective urge to reconstitute the unifying power of national identity with the speed of technological circulation. In spite of this speed, what the aesthetic urge actually achieves is confusion between the event proper and its unstable technological replication.

DeLillo's recognition of the self-referential element organising social reality, and the intimacy between television and the violent event, reminds us of Paul Virilio's consideration of the 'cinematism' and 'aesthetics of disappearance' caused by the speed of military-technological innovation. The Presidential assassination and the Texas highway killing, then, can be described as 'unstable' events, violent 'accidents' provoked or programmed by the speed of technology. Television conveys the art of the micro-narrative, the loss of unified consciousness to the dislocations and 'interruptions' of a trans-historical condition. In this sense, the event is subject to the 'aesthetics of disappearance' because technological velocity reduces violent televised images to transient fragments experienced only as 'an effect of montage'. As previously discussed, Virilio relates this technological network of fragments, or in DeLillo's case sub-textual gaps, to the military-industrial escalation. Therefore, the televised shootings not only become primary examples of the military-technological interruption, but also another means for propagating the trans-political, trans-historical system causing them in the first place. At this point, I shall take a closer look at the novel's representation of this system as it manifests in the domestic sphere and directs the foundations of family life.

Domestic Militarization and Vietnam

With the infiltration of television and global satellite communication capability into the domestic sphere en masse during the late 1950s and early 1960s, came an overall reinforcement of the ties between consumerism and military-technological progress, a relationship already considered in the unconscious cultural associations and profusion of

⁶² Mark Seltzer, *Serial Killers: Death and Life in America's Wound Culture*, (New York: Routledge, 1998), 1-2.

consumer goods in *White Noise*. For DeLillo, these ties 'refer to the bomb' because of the chain of innovation developing alongside military hardware. In this sense, an information loop occurs whereby the logic of military-technological production enhances domestic technologies, and consequently, these domestic products implicitly reflect and disseminate the ideological foundations of Cold War competition. As I have suggested, this set of developments provide the foundations for a network war based on the commodification, control and exchange of information in a global marketplace. Therefore, the nature of war is metamorphosed from battlefield combat to a strategic conflict of knowledge acquisition and virtual modelling.

In *Underworld*, DeLillo charts the foundations of this shift by drawing the connections between mass-produced domestic items and their military counterparts in the section titled: 'Better Things for Better Living through Chemistry: Selected Fragments Public and Private in the 1950s and 1960s'. By examining how the machinery of war has become entwined with the proceedings of American life, in terms of national policy and in the trivialities of domesticity, the novel sets up the connections promoting and circulating the weapons productivity and mobilisation responsible for the future shape of information warfare, and our fragmented response to it. This section of the novel describes a domestic scene from the late 1950s, a housewife preparing dinner and going through the motions of repetitive daily chores, a husband working on the convertible parked in the breezeway and a teenaged son masturbating over a photo of Jayne Mansfield in his bedroom. However, what makes the normal household setting seem peculiar is the detailed attention paid to the 'state of the art' consumer technologies designed to improve living conditions, simplify domestic duties for the housewife and convey a successful and prosperous social status for the family unit. For example, when Eric, the teenaged son looks inside the fridge he is greeted by the bright packaging of brand products and their technological gloss, but underlying this surface attraction, is a system of interconnections beyond contemplation:

He went into the kitchen and opened the fridge, just to see what was going on in there. The bright colors, the product names and logos, the array of familiar shapes, the tinsel and glitter of things in foil wrap, the general sense of benevolent gleam, of eyeball surprise [...] But there was something else as well, faintly unnerving. The throb perhaps. Maybe it was the informational flow contained in that endless motorized throb. Open the great white vaultlike door and feel the cool breezelet of systems at work, converting

current into power, talking to each other day and night across superhuman spaces, a thing he felt outside of, not yet attuned to, and it confused him just a bit. (*U*: 517-518)

The Demings, this generic American family (conveyed by their generic names: Erica, Rick and Eric) sense the interconnections and 'informational flows' linking domestic products to an overarching military-technological scheme. They manifest in the otherwise 'benevolent gleam' of household utilities and brand names as an informational 'throb' stemming from the marginalised Cold War unconscious. Although they cannot comprehend the total significance of this chain of interconnections, due to the breaks and interruptions in social reality caused by them in the first place, they nonetheless experience a kind of technological awe and dread. This trepidation gives the impression of a 'science-fiction force', the aura of Virilio's *Deus ex Machina* or machine god, entering the household and making 'some things askew' (*U*:518).

Erica, the mother of the family experiences a 'sputnik funk' (*U*: 519), a depression or 'gloom' that on a subconscious level links the launch of the Soviet satellite with an all-pervading domestic risk culture. As a consequence, she weighs up the dangers, side-effects and potential threats resulting from the consumption of convenience products. However, the same technologies conveying this Cold War paranoia in extremis also provide a kind of domestic comfort, regularity and routine that work to dull the impact of the Cold War threat by widening the technologically engineered gaps between historical significance and personal experience. Hence, Erica describes how creating family meals with her jell-o molds was 'just about the best way to improve her mood' (*U*: 514), apart from the one mold she had never used because its guided missile shape had somehow made her feel uneasy. This breakdown of social reality causes the family to see a resemblance between consumer items and military hardware, meaning that Erica's Jell-o mold and 'rubberoid' kitchen gloves, the 'jetstreak chrome' on her husband's Ford Fairlane convertible, and the 'vaultlike' refrigerator all convey an intangible aura of weapons precision. This highlights the military-technological and ideological shadow cast over the domestic realm, while dislocating these associations for the confused and 'uneasy' characters. In a comic episode that underscores this disintegration, Eric, the teenaged son of the family, sits in his room contemplating how the metallic sheen of a condom bizarrely reminds him of his

favourite weapons system. Reported in free-indirect style, thus switching between past and present tense, this passage merges and contrasts the hindsight of the post-Cold War era with the nuclear fascination and anxiety consuming Eric and the Demings' daily experience:

He liked using a condom because it had a sleek metallic shimmer, like his favorite weapons system, the Honest John, a surface-to-air missile with a warhead that carried yields of up to forty kilotons [...] They put thermal pads on the Honest John to heat the solid fuel in preparation for firing [...] And the missile's infallible flight, the way it sweeps out precise volumes of mathematical space, it's so saintly and sun-tipped, swinging out of its apex to dive to earth, and the way the fireball haloes out above its column of smoke and roar like some nameless faceless whatever. It made him want to be a Catholic. (*U*: 515)

What Eric and his family are experiencing is a kind of transference, a snap shot of the disorientating conveyance experienced by a domestic populace 'tuned in' with the terminology of war via processes of media replication and consumption. This standard white middle-class American household uncritically consumes the products of a manufacturing industry defined and advanced by the precision and productivity of the arms race. The connections and similarities elaborated here, condoms and missile systems, cars and 'jetstreak chrome', appear strange because the characters can only make these connections as unnerving likenesses on the periphery of conscious thought. The domestic sphere is shaped by the innovations of war, provided with ever-increasing modes of entertainment, communications and utility but in the same instance these developments relegate historical totality and conscious recognition to partial associations circulating within the trans-historical system. In *The Power of History*, DeLillo describes *Underworld* in terms of the tendency of language to work in opposition to the enormous technology of war that dominated the Cold War era. For DeLillo, then, the novel is a medium for exposing these technological associations via sub-textual intonation, and he achieves this by punctuating the counter-history at the margins of the 'detailed weave' of the narrative with military-technological resonance.⁶³

This type of military-technological intonation also occurs when Nick Shay's younger brother Matt contemplates the interconnections between military research, biochemical weapons development and domestic consumerism underscoring his

⁶³ Don DeLillo, 'The Power of History', *The New York Times Book Review*, (Sunday, September 7, 1997), accessed via <http://www.nytimes.com/library/books/090797article3.html>

perception. Working as a weapons analyst at secret desert compounds during the 1970s, Matt is exposed to the stories told by his colleagues about the fate of workers at these nuclear test sites, stories that have actually been proven and documented since the 1990s, when the Clinton administration acknowledged government culpability in covert testing on US citizens⁶⁴:

They marched troops to zero point after the detonations. They sent manned aircraft through radiation clouds. They injected people with plutonium to track its course through the body. They did this deliberately, without telling people what the risks were. (U: 417)

Ironically, Matt chooses not to believe these stories even though they unnerve him and raise questions about his own culpability within research endeavours that put his mathematical talent ‘to such desolate use’ (U: 417). Rather than confront the ethical aspects of his work, and divorced from the wider historical context by a fragmentary awareness of social reality, Matt begins to piece together ‘a literal lifetime of associations’ (U: 416) that hold the key to a military-industrial recognition of history beyond conscious totality. Struggling with an overpowering personal guilt over his role in weapons development and testing, Matt begins to reminisce about the early days of his career at Army Intelligence School. At this institution he was surrounded by the strategists of war: combat analysts and counterintelligence specialists contributing to the course of the Vietnam conflict. Recollecting his own tour of duty, Matt struggles with the conflicting feelings of national duty and family responsibility troubling his conscience. Memories of secret bombs in ‘unnumbered tons’, and rumours about ‘a substance stored in black drums near the perimeter of the compound’ (U: 462) hint at the networks of information and hidden agendas operating from beyond the battlefield. These are forces that tie minute pieces of data into an impenetrable interconnected system of knowledge. While moving shipping drums of a herbicide with ‘identifying orange stripes’ (U: 463), Matt makes a mental association between the likeness of these shipping containers with the cans of frozen Minute Maid orange juice available on supermarket shelves throughout the United States. According to the rumours he has

⁶⁴ See the *Final Report of the Advisory Committee on Human Radiation Experiments*, (New York: Oxford University Press, 1996), 620pp.

heard on the compound, these black drums contain a substance with cancer-inducing properties and so their ominous presence on the base is a cause for discomfort. We learn that these shipping drums contain the herbicide and defoliant Agent Orange, used by the US military between 1961 and 1971 as part of its 'herbicidal warfare' programme designed to destroy the local ecosystem for improved visibility during reconnaissance and surveillance. In this sense, Agent Orange and Minute Maid orange juice become interconnected in a relationship that reflects the militarization of the domestic:

And how can you tell the difference between orange juice and Agent Orange if the same massive system connects them at levels outside your comprehension?

And how can you tell if this is true when you're already systemed under, prepared to half believe everything because this is the only intelligent response? (U: 467)

For Matt Shay, the weight of these military and domestic connections is virtually unbearable because they open the floodgates for endless and simultaneous associations that lead the subject to: 'half believe the most implausible things because you'd be stupid not to' (U: 467). Acknowledgement of the military-technological system interconnecting everything remains an impenetrable and incomprehensible task because the unlimited information generated from these networks overwhelms the senses, and reconnects on levels 'outside comprehension'. An innate sense of risk transfers from the tactical chemical warfare of the modern battlefield to the consumption of previously innocuous household groceries, as both are tied within the military-industrial circuits responsible for instigating historical disorientation. In order to demonstrate this further, I shall now investigate the battlefield innovations contributing to this military-industrial information loop.

Vietnam and Battlefield Innovation

The context framing Matt's experiences has degenerated via an overabundance of information, so that the domestic production engineered for 'better living', and the US military production focused on tactical success in Vietnam can be linked together, but only as superficial likenesses between orange juice cartons and herbicides. Therefore, the greater scheme linking domestic products and entertainment technologies to the

enhanced combat systems of the Vietnam War deliberately remain at the subtextual margins of the novel in accordance with the characters' fragmented perception. However, the concept of 'electronic warfare' shaping the Vietnam conflict undoubtedly had an impact on the growth and development of civilian technologies during the 1960s and 1970s, with global positioning satellites advancing 'smart' weapons systems, television and video equipment enhancing surveillance, and computer modelling informing strategic planning. Each of these areas has a domestic counterpart branching from, or developing in tandem with military demand, for example, the application of satellite navigation technology in consumer products. What came to be known as the 'automated battlefield' originated in 1966 when US Secretary of Defense, Robert S. MacNamara asked a panel of top scientists to find alternatives to the costly and seemingly fruitless bombing of North Vietnam. His proposition consisted of a fence against North Vietnamese infiltration that would take the shape of a physical barrier of watchtowers and mines, but also an electronic barrier taking advantage of new technology to track and target the enemy. Over the next several years, military research and development focused on a far-reaching transformation of conventional warfare, which would consolidate the militarization of American production.

By 1969, US forces in Vietnam had already begun to deploy key elements of the automated battlefield; thus putting MacNamara's ambitious plan into action. This included the placement of electronic sensors to direct air strikes against traffic along the Ho Chi Minh Trail in Laos, a development designed to restrict the movement of North Vietnamese troops and supplies in a southerly direction. These devices were able to detect certain kinds of physical data, convert them to electronic signals, and transmit the results to waiting receivers. The most common detection units were seismic and acoustic, but other remote devices detected 'magnetic anomalies, interruptions in self-generated electromagnetic fields, chemicals from human bodies or truck exhausts, heat through infrared sensors, or movement via small ground radar sets'.⁶⁵ These methods of detection led to attack from the air. Continuously updated computer-analysed data directed aircraft to the appropriate zone, guided their attack runs, and even controlled

⁶⁵ Barton C. Hacker, 'The Machines of War: Western Military Technology', *History and Technology*, 21.3, (September, 2005), 255-300.

bomb release. The use of television cameras, imaging infrared devices and computerised fire control systems fitted to the likes of the AC-130 aircraft generated the kind of surveillance data described by Matt Shay in *Underworld* when working on 'cranking rolls of film across a light box', the rolls of film taken from 'aerial recon, an endless series of images sucked up by the belly cameras of surveillance planes' (*U*: 462). These advancements, alongside the introduction of smart or laser-guided bombs, would eventually prompt General William Westmoreland, US Army Chief of Staff to state the future potentials of these technologies in his 1969 'Address to the Association of the US Army':

On the battlefield of the future, enemy forces will be located, tracked, and targeted almost instantaneously through the use of data links, computer assisted intelligence, and automated fire control. With first round kill probability approaching certainty, and with surveillance devices that can continually track the enemy, the need for large forces to fix the opposition physically will be less important [...] Today machines and technology are permitting economy of manpower on the battlefield [...] But the future offers even more possibilities for economy. I am confident the American people will replace wherever possible the man for the machine [...] with cooperative effort, no more than ten years separate us from the automated battlefield.⁶⁶

On the surface, Westmoreland's 'automated battlefield' seemed well underway to realisation with advanced computer and satellite systems like those being deployed by 'Operation Igloo White' growing in strength and numbers. The US command centre of Airforce Operations was responsible for monitoring banks of video displays and controlling IBM computers hooked up to thousands of sensors across the Ho Chi Minh Trail.⁶⁷ These central computers were also capable of controlling the release of bombs, in an act of automation replacing human action with the calculated capability of the machine. However, Westmoreland's sweeping vision did not take into account the Viet Cong's ability to outwit some of these technologies with improvised counter-measures and resourcefulness, nor did it tally with the strategic errors and indecisiveness prolonging the conflict well into the 1970s. To an extent, then, Westmoreland's Address conveys a kind of technological propaganda, simultaneously justifying a military

⁶⁶ 'Address to the Association of the US Army', 1969, reprinted in Paul Dickinson, *The Electronic Battlefield*, (Bloomington: Indiana University Press, 1976), 24-25.

⁶⁷ See Paul N. Edwards, *The Closed World: Computers and the Politics of Discourse in Cold War America*, (Cambridge MA: MIT Press, 1996), accessed via www.si.umich.edu/.

economy directed toward the information network, and a form of encouragement pressing American citizens to accept and support a military-technological industry both on the battlefield and in the home.

What this automation has created, in terms of our consideration of the socio-historical forfeiture imposed by technological systems, is a form of de-realisation and 'substitution' of events, whereby the war-scene is replaced with a computerised map grid charting the movement of the enemy. In the interview 'Cyberwar, God and Television', Paul Virilio describes this set of conditions as part of the televised crisis interrupting our perception of reality with the 'accident of reality', a degenerative condition communicated by new technology that 'substitute a virtual reality for an actual reality'.⁶⁸ This substitution causes the de-realisation of the battlefield to circulate via the technological mediums sharing their developmental origins with military hardware, and therefore the apparatus of civilian communications and entertainment become central to a collective disorientation that strips the war-scene of its historical position. Without any reference point to work with, the images of war captured on surveillance operations like those described by Matt Shay, become impossible to interpret as historical artefacts; hence contributing to his inability to fathom the interconnections relating all technologies to the bomb. As highlighted in the novel by the Demings' 'sputnik funk' and technological discomfort, the militarization synonymous with American consumerism has already initiated this degenerative historical condition. However, with the increasing popularity and profile of television during the 1960s comes a further de-realisation of the war-scene, a development that Caren Kaplan describes as passive consumption: 'Most US citizens were brought close to scenes of destruction and death by the media than by experience. Thus, in the United States, we could be said to be consumers of war since our gaze is fixed on representations of war'.⁶⁹ The militarization of American consumer identity that Kaplan identifies, then, is a key factor enabling the trajectory toward a new kind of networked opposition. Although the 'speed of delivery' central to smart weapons systems was not completely developed during Vietnam, the ideological push toward automated command and control innovations replacing human

⁶⁸ Virilio's interview with Louise Wilson, 'Cyberwar, God and Television', accessed via www.ctheory.net

⁶⁹ Caren Kaplan, 'Precision Targets: GPS and the Militarization of US Consumer Identity', *American Quarterly*, 58.3 (2006), 693.

decision-making and strategy, and the symptomatic consumption of de-realised media, reveal the prototype for a future pure war of information. At this stage, we need to return to the progression of the narrative in order to evaluate how these battlefield networks and weapons systems relate to the experiences of the novel's main protagonist, Nick Shay.

Matt Shay's recollections about the battlefield hardware, biochemical agents used as defoliants during Vietnam, and the products of his own nuclear research in the secret New Mexico installation, feed into his brother's lifetime preoccupation with the abject waste stored at the psychological and physical margins of experience. Throughout the novel, Nick Shay is presented as a remote and troubled character, haunted by the disappearance of his father and the fatal consequences of a shooting accident which resulted in the death of an older man. These experiences cause Nick to become isolated and reserved from his friends and family, an unlikely narrative focus in terms of conventional character development. In the same way that the narrative strands in *Underworld* refuse to coalesce, remaining fragmentary and sub-textual, so does Nick's characterisation reflect these breaks and anomalies. Because his identity remains in flux for the majority of the novel, Nick appears to be completely preoccupied with the interconnections and systems that might contain some clandestine meaning. Accordingly, he describes himself as having 'that paradoxical gift for being separate and alone and yet intimately connected, mind-wired to distant things' (*U*: 89), and incidentally it is this 'mind-wiring' that leads him to purchase the baseball from the 1951 Pennant with all its national symbolism and Cold War associations. The emotional waste that Nick buries deep within his subconscious runs parallel with his occupation as a waste management consultant, a career based upon the detritus of civilisation, waste that infers the military-industrial under-history relating 'everything to the bomb'. Nick's consultancy job causes him to embark on a lecture series on how to convert military bases into state-of-the-art landfills capable of storing masses of radioactive waste for thousands of years. His waste containment procedures are revolutionary and much needed in a techno-scientific world able to produce tons of nuclear, biomedical and synthetic waste able to outlast its usefulness by many years. Hence, the by-products of Matt Shay's military-technological and scientific world have reached a critical mass

where the concealed 'underworld' of waste matter threatens to outweigh the technological advances from which it originates.

Underworld highlights the interconnections between late-capitalist consumerism and personal waste as the by-products of industrial activity. Moreover, it considers how this system of production and detritus relates directly to psychological waste, the tenets of abjection that deem personal and collective boundaries and prescribe cultural identity and social control. For the purposes of this military-industrial analysis, it is necessary to consider one aspect of this capitalist-consumer system: the consequences of the arms race, and the urge to increase techno-scientific productivity to maintain symbolic national supremacy. The Cold War quest to out-produce the Soviet opposition created a chain-reaction binding all research, development and production to nuclear capability. As the section titled 'Better Things for Better Living through Chemistry' demonstrates, this Cold War productivity may have improved living conditions and domestic technologies throughout the period; however the eventual upshot of this escalation is an over-abundance of indestructible nuclear and chemical waste. For Nick Shay, the harmful by-products of the military-industrial complex, combined with the emergence of unbridled late-capitalist opportunism and the breakdown of the Soviet Union in the post-Cold War era, have led him to pursue a business venture at a desert site in Kazakhstan during the 1990s. As Nick observes in Russia and its satellites, 'fixing and hustling have come out of the shadows of black-market corruption to create a wholly open economy of plunder and corruption (*U*: 795). The company he works for act as a broker for Tchaika, a kingpin of this new dubious Russian capitalist system, and while being shown around the test site by host, Viktor Maltsev, Nick learns that the company trade in nuclear explosions for purposes of waste disposal:

Viktor comes back and points to a corner of the cleared area where thick cables snake away from several pieces of equipment set in a pale square of earth. He says this is ground zero. We stand there nodding in the wind. He says the shot will be fired in granite about one kilometre down. Reactor waste and cores from retired warheads are packed around a low-yield nuclear device. He says the hole drilled from the surface to the firing point has been tamped and plugged to keep radiation from venting. (*U*: 793-794)

Military representatives and industrialists alike have been invited to witness this experimental explosion of high grade plutonium waste, a showcase to encourage future business partnerships. When compared with the detonation of the Russian atomic bomb in 1951, this explosion seems to convey the disintegration of the Soviet state by volatile capitalist ventures. Rather than re-enact the awe and dread incurred by the 1951 explosion, this controlled experiment takes on the quality of a staged event drained of its Cold War potency. The waste traders, military representatives and press invited to witness the explosion are given a tour of the old test site, an experience that causes Nick to sense 'a graveness, a spirit of old secrets gone bad, turned unworthy, old schemes gone wrong' (*U*: 792). This 'graveness of spirit' occurs in conjunction with the misplaced anticipation and spectatorship that reduce the totalising powers once ascribed to the bomb to a benign and sterile emptiness.

What Nick and his colleague Brian Glassic have witnessed is the simultaneous obliteration of weapons and waste, the military-technological product and its detritus, in a single all-consuming explosion. In this sense, the product and its resulting waste have destroyed one another in a morally questionable system, where nothing is left other than the exchange of information and currency within the newly-configured late-capitalist global economy. Once considered a threatening force, the American perception of science and technology has taken on a benign public image via the popularisation of the computer technologies made viable by military funding and development. As a result of these developments, American identity is synonymous with the networks of information and exchange promoted by computers and telecommunication technologies. Nick Shay recognises this system at work when he states that:

I still respond to that thing you feel in an office, wearing a crisp suit and sensing the linked grids lap around you. It is all about the enfolding drone of the computers and fax machines. It is about the cell phones slotted in desk chargers, the voice mail and e-mail—a sense of order and command reinforced by the office itself and the bronze tower that encases the office and by all the contact points the shimmer in the air somewhere. (*U*: 806)

Although Nick feels a sense of purpose, order and identity within this network 'grid', a source of comfort and security that enables him to achieve a level of resolution and contentment in personal and family matters by the close of the novel, this 'New World

Order' of capitalist consumer flows and information exchange promotes a different kind of explosive potential in the post-Cold War era. Nuclear power may have been diminished by the processes of capitalist exchange witnessed in Kazakhstan; however the potency of the deus ex machina (of which the bomb is the 'spiritual centre') continues and manifests within the network communications grid generating a potential war of information. Central to this communications 'explosion' is the development of the internet, a military innovation taking network capability to new levels.

The Internet: DeLillo's Information Bomb

Although the military-technological associations are continuously prevalent in the subtext of the novel, it remains for the reader to map the connections and integrations leading to this virtual information war of networked computers and website hyperlinks. It is possible to achieve this linearity by developing the unconscious gaps DeLillo has left in the narrative. Here, what is not explicitly stated is the Cold War foundation of the decentralised internet as an information failsafe in the event of a nuclear attack.

Although the history of the internet is as vast and complex as the decentred global links of the world-wide-web itself, with contributions from the RAND corporation, international 'think tanks' and university research projects like those carried out at MIT, the US military motivation for developing such a comprehensive computer network remains clear. Beginning in August 1962, with the first recorded description of the social interactions that could be enabled through networking, the source of the internet dates back to a series of exhaustive memos written by JCR Licklider of MIT discussing his conception of a 'galactic network', an open information infrastructure not confined by geographical position.⁷⁰ This entailed a globally interconnected set of computers through which everyone could quickly and easily access data and programmes from any site. Obviously, this concept was of great interest to the US Department of Defense because of the potential capability of decentralisation to maintain communications and avoid total network damage in the aftermath of a nuclear attack. Consequently, in October

⁷⁰ Barry M. Leiner, et al., *A Brief History of the Internet*, accessed via The Internet Society www.isoc.org, also see Robert J. Klotz, *The Politics of Internet Communication*, (Lanham MD:Rowman and Littlefield, 2003), 280 pp.

1962, Licklider would become the first head of the computer research programme at the Defense Advanced Research Projects Agency (DARPA) where he was able to convince fellow colleagues and successors of the importance of this widespread networking concept.

In association with Licklider's research and development, fellow MIT researcher, Leonard Kleinrock published the first research on packet switching theory in 1964. Kleinrock gained the support of another colleague, Lawrence G. Roberts, for the theoretical viability of communications using packets as opposed to circuits, and in doing so created the foundation for practical computer networking. A key step in this research was to make computers 'talk' together, and in 1965 Roberts decided to test this theory by connecting an MIT computer to one at Berkeley's research centre in California via a low speed dial-up telephone line; thus creating the very first wide-area computer network. Roberts' research provided vital information on how to progress with widespread networking because he found that:

The result of this experiment was the realization that the time-shared computers could work well together, running programs and retrieving data as necessary on the remote machine, but that the circuit switched telephone system was totally inadequate for the job. Kleinrock's conviction of the need for packet switching was confirmed.⁷¹

Acknowledging the importance of packet switching theory, Lawrence also made the move to Department of Defense offshoot, DARPA, to continue priority development of the computer network concept. Subsequently, plans for the 'ARPANET' computer network were opened out to the academic community in 1967. By 1968, a DARPA funded community had emerged, and the structure and provisions for the ARPANET had been put into place with packet switches referred to as Interface Message Processors (IMPs) facilitating the overall design of this prototype internet.⁷²

Now that the technological architecture of the ARPANET was in place, it was necessary to begin developing the network infrastructure. Leonard Kleinrock was responsible for implementing the first stage of this process at the Network Measurement Centre based at UCLA. In quick succession, nodes were added at the Stanford Research

⁷¹ Leiner, et al., *A Brief History of the Internet* accessed via The Internet Society, www.isoc.org.

⁷² Ibid.

Institute, the University of California, Santa Barbara and the University of Utah. Therefore, by 1969, four host computers had been successfully connected together under the auspices of the ARPANET. The initial network research undertaken with Department of Defense support and funding would facilitate the underlying methodology and organisation of the internet. Initial concepts developed by DARPA, including the packet switching network, and the intention that the ARPANET would develop into multiple independent networks of arbitrary design, would generate the basis for the open architecture internet users are familiar with today. As Barry M. Leiner et al. have noted:

In this approach, the choice of any individual network technology was not dictated by a particular network architecture but rather could be selected freely by a provider and made to interwork with the other networks through a meta-level 'Internetworking Architecture'.⁷³

This 'meta-level' network architecture is the basis for the open and dispersed topological structure of the current-day internet. However, the burgeoning networks based around the ARPANET remained almost entirely funded by the US government until the early 1980s, and therefore restricted to non-commercial research and development. Initially connections were only set up between military sites and universities, but after a number of years spent refining its structure and applications, DARPA began to look for another agency to take responsibility for this communications network while separating the US military portion into a self-contained entity known as the MILNET. From this point onward, the application of the prototype internet as a communications utility began to diversify, and a growing number of companies and educational institutions began participating in research projects or offering technical support to interested parties around the globe. Although this diversification would lead to widespread commercial application of internet technology, an unprecedented exchange of information and an overall transformation of the global economy, the origins of computer networking remain military in design, and the central motivation for DARPA research and funding into the prototype ARPANET nuclear contingency. As Paul N. Edwards has noted with reference to the various computer projects directed by the Department of Defense:

⁷³ Ibid.

Thus the pattern of military support has been widespread, long-lasting, and deep [...] this pattern became deeply ingrained in postwar institutions. But military agencies led cutting-edge research in a number of key areas even after a commercial industry became well established in the 1960s [...] the computerization of society [...] has essentially been a side effect of the computerization of war.⁷⁴

Therefore, the Cold War military-technological framework joins together nuclear weapons development and computer networking in a partnership of deterrence and contingency that facilitates this 'computerization of war'. As Edwards recognises, the 'computerization of society' can be described as a subsidiary of military research. Accordingly, then, the architecture of the commercial internet is embedded with these implicit associations, and its open and decentralised flow of information affords the basis for a transformation, or 'mutation', of Cold War conditions into a global war of information. So, now we must turn our attention to the novel's fictionalisation of this networked information bomb as it indiscriminately infiltrates public and private spheres.

In the post-September 11th article 'In the Ruins of the Future' (2001), DeLillo states unequivocally that technological development is the key factor shaping and directing the social, political and economic future of the United States. He describes technological research and production as the nation's

Fate, our truth [...] the materials and methods we devise make it possible for us to claim our future. We don't have to depend on God or the prophets or other astonishments. We are the astonishment. The miracle is what we ourselves produce, the systems and networks that change the way we live and think.⁷⁵

The sub-textual framework of *Underworld* is clearly made up of such technological 'astonishments', the products, systems and networks that improve communications, transform living conditions, encourage a global economy and indicate the growing power of the Deus ex Machina in opposition with 'God or the prophets'. However, as I have set out to demonstrate, the technologies DeLillo has chosen to weave into the chronology of the novel each contribute to the military-economic unconscious underpinning the narrative, developments that indicate a course toward a fully integrated information war central to our techno-scientific fate. 'Das Kapital', the final section of

⁷⁴ Edwards, 'The Closed World', accessed via www.si.umich.edu.

⁷⁵ Don DeLillo, 'In the Ruins of the Future: Reflections on Terror and Loss in the Shadow of September', *Harpers*, (December, 2001), 33-40, accessed via <http://www.guardian.co.uk>.

the novel presents the escalation of these interconnected systems in the quasi-religious influence and power ascribed to networked computer technologies.

So far, the novel has plotted a sub-textual trajectory for the reader to expand upon, a military-technological framework culminating with the staggering network capability of the internet. It is at this point in the under-history of technological ascendancy that DeLillo chooses to conclude his novel. He closes the narrative at the point where the vast and complex interconnections of networked systems and the competing versions of reality generated by virtual computer technologies replace, but also redistribute and redefine traditional hegemonic systems of knowledge. As Eugene Thacker has stated in his work on technological networks, swarms and multitudes, the 'network society' constitutes a series of mutations in the body politic. These mutations are 'structurally innovative' but 'politically ambivalent'; therefore in certain contexts they have the potential to be simultaneously politically radical and conservative in nature:

That the internet displays a distributed or decentralized topology is not an indicator of the inherently democratic principles of information technology. In fact, in many cases it has had the reverse effect, by canalizing online activity, stifling innovation, 'globalizing' access [...] and generally preventing the concurrence of critical and technical thinking ('don't think, click'). Caught between the extremes of technical innovation and political conservatism, new technologies seem to promise social and political change at the same time that they categorize and disable it.⁷⁶

Consequently, the complex interconnections of the internet and other associated computer technologies generate the kind of global connectivity and information transfer that encourages isolated cells to react against globalisation. However, these mutations concurrently enable an overabundance of information to circulate conservative or reactionary values that diversify international economic organisations and propagate established military-industrial principles. Therefore, rather than use the novel's final pages to mark the end of an era of Cold War opposition, and the beginning of a vastly different 'New World Order' of global relations, innovations and economies, the technological subtext of *Underworld* indicates a continuation and transformation of existing systems as they provide the basis for the ever-increasing contemporary information war.

⁷⁶ Eugene Thacker, 'Networks, Swarms, Multitudes: Part One', eds. Arthur and Marilouise Kroker, *CTheory*, (18th May, 2004), accessed via <http://www.ctheory.net/articles.aspx?id=423>.

By the early 1990s, the total communication network presented in *Underworld* has begun to challenge the explanatory and organisational power of religious conviction. The militarized 'machine-god' described by Paul Virilio, or the 'spiritual god of technology' instigated by nuclear power according to DeLillo, has contested the singular authority of religion as a means of interpretation, in favour of the heterogeneous information flows that inform our networked existence. This technological assimilation of faith is a prominent feature of the characterisation of Sister Edgar, the fearsome nun whose religious fervour is interspersed throughout the text in Matt Shay's memories of chastisement at Catholic school: 'Sister prowled the space between her desk and the blackboard, moving in a rustle of monochrome cotton, scrubbed hands flashing. She recited questions from the Baltimore Catechism and her students responded in a single crystal voice' (*U*: 716). In other sections of the novel set during the 1980s and early 1990s, she appears as a community outreach worker, directing projects to provide food and medical aid to the drug addicts and homeless on the streets of the Bronx:

The nuns deliver food to people living in the Wall and nearby, the asthmatic children and sickle-cell adults, the cases of AIDS and the cocaine babies, and every day, twice a day, three or four times a day, they drive their van past the memorial wall. This is the six-story flank of a squatters' tenement on which graffiti writers spray-paint an angel every time a local child dies of illness or mistreatment. (*U*: 811)

Sister Edgar's religious work spans the forty year period outlined in the novel, from her experiences as a teacher transmitting the threat of the bomb to her students, to her experiences working with the inner city victims of AIDS and drug addiction. Her reaction to these encounters is tempered by a compulsive fear of contamination. It is no coincidence that her subsequent preoccupation with safeguards against deviant behaviour, filth and disease echo the moral and political crusades of Cold War containment; indeed, the crusades, phobias and nuclear paranoia directed by her namesake, J. Edgar Hoover. In fact, this God-fearing representative of the church views herself as a direct product of Cold War conditioning, a result of forty years of nuclear anxiety that has resulted in the fusion of religious doctrine and morbid 'duck and cover' procedure within the confines of her classroom:

Then Sister told them to place their dog tags out above their shirts and blouses so she could see them. She wanted to make sure they were wearing their tags. The tags were designed to help rescue workers identify children who were lost, missing, injured, maimed, mutilated, unconscious or dead in the hours following the onset of atomic war (*U*: 717).

The spectre of atomic warfare, the ‘spiritual god’ controlling all aspects of the technological order remains a constant aspect of Sister Edgar’s existence, so much so that she is subject to the same kind of paranoid nostalgia that Klara Sax intimates while working on the disused B-52 art project. Edgar goes as far as to consider herself a ‘Cold War nun’ (*U*: 245), ever ready for Soviet attack, and in later life she acknowledges the ‘thrilling’ aspect of war that often causes her to conjure: ‘the flash even now, with the USSR crumbled alphabetically, the massive letters toppled like Cyrillic statuary’ (*U*:245). Although the period of heightened nuclear threat has since passed, the elderly Sister Edgar is aware of its network legacy in the consumer products and technologies used on a daily basis. While ‘force-fitting’ a pair of latex gloves in preparation for a visit to the ghetto, Edgar feels the ‘ambivalence’ and ‘conflict’ associated with the products of techno-scientific development:

Safe, yes, scientifically shielded from organic menace. But also sinfully complicit with some process she only half understood, the force in the world, the array of systems that displaces religious faith with paranoia. It was in the milky-slick feel of these synthetic gloves, fear and distrust and unreason (*U*: 241).

The latex gloves convey to Sister Edgar the ambivalent power of military-technological associations. The interconnected systems instigated by nuclear research and development have infiltrated the framework of consumer society so successfully, that even the protective ‘milky-slick’ feel of these items intimates the all-encompassing nature of the networked military complex. However, the motivations and complexities of this ‘process’ remain obscured and ‘half-understood’, only to surface as Sister Edgar’s subconscious associations. These ‘sinfully complicit’ systems, then, punctuate DeLillo’s sub-textual military-technological agenda, and highlight the ‘displacement’ of religious meaning with the order of the ‘machine-god’.

This susceptibility to the ‘half-understood’ interconnections stemming from the military-technological system helps to explain, then, why the novel concludes with Sister Edgar’s crisis of faith, death and subsequent assimilation into the technological

systems on the periphery of her living consciousness. While delivering food, clothing and medicine to the sick and homeless, Sister Edgar and her companion Sister Grace are informed of a twelve-year-old girl living 'wild' on the streets around the 'Wall', the squatters' tenement adorned with graffiti art angels for the death of each child in the neighbourhood. Edgar becomes fixated with the girl, known as Esmerelda Lopez, because somehow this homeless child signifies for the elderly nun a kind of 'radiant grace [...] even a source of personal hope, a goad to the old rugged faith' (*U*: 811). The nuns make it their mission to track down Esmerelda, save her from the streets and enrol her in a school programme. However, on one of their visits to the Wall they learn that the girl was savagely beaten, raped and then thrown from a high-rise building. Sister Edgar is thrust into a state of religious turmoil at the news of Esmerelda's murder: 'She believes she is falling into crisis, beginning to think it is possible that all creation is a spurt of blank matter that chances to make an emerald planet here, a dead star there, with random waste between' (*U*: 817). This crisis of faith causes a kind of primordial fear, a 'second force' of nature, 'insecure, untrusting' (*U*: 817) that convinces Edgar she is succumbing to a dark descent.

It is at this crisis-point that the Sisters begin to hear stories of a possible miracle occurring in the 'bottommost Bronx' (*U*: 818) by the desolate train yards and the old railroad bridge spanning the Harlem River. People have gathered at this spot to watch an advertising sign suspended above the riverbank because news has spread that the face of the murdered Esmerelda appears projected momentarily on the billboard, like an apparition of the Virgin Mary. Edgar insists that she must witness this potential miracle in some faint hope of reaffirming her faith. However, Gracie has reservations about these stories being 'the worst kind of tabloid superstition' (*U*: 819). Nonetheless, the nuns gather with the masses around the Minute Maid Orange Juice billboard, another of DeLillo's 'half-understood' sub-textual interconnections, relating consumerism and religion back to the Agent Orange Matt Shay recalls when thinking about his tour of duty in Vietnam. Everything has become part of an information flow connected by the military-technological scope of the 'machine-god', and this quasi-religious spectacle is no exception. Edgar spends time studying the detail of the billboard; the consumer

familiarity of the Minute Maid cans, and then just as a commuter train passes by and illuminates the sign she sees the image that puts her in ‘body shock’:

A blurted sort of whoop, the holler of unstoppered belief. Because when the train lights hit the dimmest part of the billboard a face appears above the misty lake and it belongs to the murdered girl. A dozen women clutch their heads, they whoop and sob, a spirit, a godsbreath passing through the crowd. (*U*: 821)

Whether the nuns and the curious crowd have witnessed a miracle or a mere trick of the light is irrelevant to Sister Edgar, because she now holds the ‘image tight in her mind’ (*U*: 824), and finds solace in the ‘swaying soulclap raptures’ and ‘fellowship of deep belief’ (*U*: 824) it has roused. She feels safe in the knowledge that she has witnessed the power of transcendence, even though it is framed by the military-technological information flows that threaten the integrity of religious experience. Nonetheless, Sister Edgar feels that, now that she has witnessed a spectacle of this magnitude, there ‘is nothing left to do but die’ (*U*: 824), and inspired by the rapture of the event she passes peacefully in her sleep.

In death, all the ‘half-understood’ military-technological systems and connections conveying the spectre of nuclear intimidation become instantaneously available to Sister Edgar. DeLillo permits her a kind of rebirth and transcendence in cyberspace:

In her veil and habit she was basically a face, or a face and scrubbed hands. Here in cyberspace she has shed all that steam-ironed fabric. She is not naked exactly but she is open—exposed to every connection you can make on the world wide web (*U*: 824)

No longer burdened by a physical body, or directed by the organising functions of space and time, Sister Edgar is ‘open’ and ‘exposed’ to the ultimate connectivity of the internet, the digitised phenomena that joins all ‘human knowledge gathered and linked, hyperlinked, this site leading to that, this fact referenced to that, a keystroke, a mouse-click, a password—world without end’ (*U*: 825). In this sense, the religious authority Sister Edgar has abided by during her lifetime is instantly merged with, perhaps even usurped by, the quasi-religious power-matrix of DeLillo and Virilio’s ‘machine-god’: ‘she is in cyberspace, not heaven, and she feels the grip of systems [...] There is a

presence here, a thing implied, something vast and bright' (*U*: 825). In life, Edgar was marginally aware of the military-technological associations engulfing her existence, the sense that nuclear capability was the ordering principle behind all technological achievements. In cyberspace, this faint realisation, this 'thing implied', becomes an immediate 'presence'. Edgar realises she is linked to a website endlessly propagating the horror of nuclear holocaust. Reported in the present tense, the narrative voice appears to merge with Edgar's inner conscience so that the speed and immediacy of this cyberspace condition becomes all the more apparent:

When you decide on a whim to visit the H-bomb home page, she begins to understand. Everything in your computer, the plastic, the silicon and mylar, every logical operation and processing function, the memory, the hardware, the software, the ones, the zeros, the triads inside the pixels that form the on-screen image—it all culminates here.

First a dawnlight, a great aurora glory massing on the color monitor. Every thermonuclear bomb ever tested, all the data gathered from each shot, code name, yield, test site (*U*: 825)

Everything from the computer hardware, to what is left of Sister Edgar's consciousness is a product of the military-technological complex of which nuclear power is the 'spiritual god'. In cyberspace the virtual version of the nuclear holocaust has not only occurred, but is subject to an endless repetition via the decentralised links that construct the world-wide-web. Sister Edgar's rebirth in cyberspace has revealed that the organising principles driving the Cold War quest for nuclear arms and military-technological supremacy is not only embodied in the formulation of the internet, but is also proliferated by the interconnections it facilitates. In fact, a kind of transformation has taken place in cyberspace based on the ethos of nuclear warfare and Cold War opposition, a transformation of traditional war into the purest form of information war. The H-bomb has been replaced by its counterpart, the information bomb and therefore traditional battlefield combat has morphed into a conflict of total knowledge supremacy and network communication. The military-technological innovations preceding this intricate computer networking have, as I have demonstrated, provided the historical subtext for the novel. This constitutes a chronological trajectory of battlefield communication devices leading to the most extreme form of General Westmoreland's battlefield automation: a virtual data war in cyberspace. At this juncture, then, it is

pertinent to discuss the critical assessments made by Paul Virilio and Jean Baudrillard regarding the velocity and de-realisation of this information warfare.

The loss of Military-Technological Consciousness: Networking

So far, the technological subtext presented in *Underworld* has demonstrated a chronology of the postmodern weakening of historical memory, a trace of the military-industrial 'under-history' obscured by the network connections of the late-capitalist era. The internet constitutes the intensification of this process, the point where an overabundance of network information cements the historical and political unconscious divorcing the subject from comprehensive cognitive mapping. Computer networking may have maximised the flow of heterogeneous information circulating around the contemporary body politic, but this is a diversification devoid of critical substance and oppositional power. The contemporary internet, as with the radio, satellite and television technologies previously charted in the novel, is a product of the same military order underpinning Cold War global relations. The novel highlights parallels between Sister Edgar's connectivity on the world-wide-web and the continual replay of nuclear holocaust on the H-bomb website, although the historical tissue joining them remains on the periphery, obscured by the information exchange instigated by the military order in the first place. However, this is not the only conspicuous absence framing the final pages of the novel. When taking into consideration that *Underworld* is based on over forty years of Cold War history, and that the closing section, 'Das Kapital', describes occurrences during the early portion of the 1990s, it is significant that the fall of the Berlin Wall in November 1989 and the beginning of the Persian Gulf War in January 1991 are missing from the public and private history of the narrative. Consequently, it is important to consider why the 'thawing' of Cold War hostilities, the development of new global relations and the escalation of conflict in the Middle East are deliberately displaced by the multi-media technologies constituting the basis for a war of information.

Paul Virilio's discussion of the 'de-realisation' caused by the speed and dissemination of networked information technologies provides a viable explanation for

the conspicuous absence of these events from the pages of the novel. Virilio's analyses of network communication technologies and computer-generated virtual realities formulate what he describes as a 'media of crisis', where military reality is the guiding force behind all aspects of virtual and actual experience. From this point of view, all networked technological developments have evolved from a military incentive. Subsequent computer technologies have created a system in which two forms of reality happen simultaneously, the virtual and the actual; both of which now function with equal measure in our networked society. Virilio refers to this interplay of separate realities as 'substitution', and the example he provides to demonstrate them is the collision of cyberspace and actual experience taking place with the use of flight simulators by the US Air Force:

The US Air Force flight simulator—the first sophisticated simulators were created by the US Air Force—has been used in order to save gas on real flights by training pilots on the ground. Thus there is a cyberspace vision: one doesn't fly in real space, one creates a poor cyberspace, with headphones etc. It is a different logic [...] It creates a different world. So, of course, the simulator quickly became a simulator of accidents, but not only that: it started simulating actual flight hours, and these hours have been counted as real hours to evaluate the experience of pilots.⁷⁷

Virtual computer training constitutes a form of substitution because the flight simulations become equivalent to actual flight experience. However, they convey a specific 'accident' or 'interruption' because the technological innovations making basic virtual reality and network communication possible inhibit any critical ability to differentiate historical reality from substitution. Consequently, our capacity to interpret 'real-time' events, such as coverage of the fall of the Berlin Wall, and the proliferation of live news feeds from the first Gulf War, become so confused that the meaning held together by historical resonance is irreparably weakened.

By leaving military-technological gaps in the structure of the narrative and omitting key political history, DeLillo's novel acknowledges the debilitating effects of a media of crisis derived from the military-industrial complex. Moreover, by closing the novel with the interconnections and instantaneity of the internet, he recognises the same technological speed of delivery as Virilio. The abundance of information devoid of

⁷⁷Virilio's interview with Louise Wilson, 'Cyberwar, God and Television', accessed via www.ctheory.net

substance, and the speed of its dissemination across an online network, is contributing factors in the de-realisation inhibiting our ability to categorise and interpret the real-time reports and images of war streamed unrelentingly throughout the globe. For Virilio, the new military technologies and real-time coverage of conflict constituting the Gulf War have instigated a move toward a 'cyberwar' or 'video game' war where instantaneous broadcasting and battlefield automation further erase the boundaries between the real and the virtual:

Firstly, a de-realisation, the accident of the real. It's not one, two, hundreds or thousands of people who are being killed, but the whole reality itself. In a way, everybody is wounded from the wound of the real. This phenomenon is similar to madness. The mad person is wounded by his or her distorted relationship to the real [...] Virtual reality leads to a similar de-realisation. However, it no longer works only at the scale of individuals as in madness, but at the scale of the world.⁷⁸

Because of this global phenomenon, history becomes subject to a 'one-time-system': 'global time' within which local temporality and history are lost to the tyranny of universal instantaneity.⁷⁹ Moreover, the symptoms of disorientation reach a state of critical mass propagating a war of data devoid of substance. The 'accident of the real' is our distorted perception of the historical event, and it is this interruption that erases military-industrial origins from our collective memory, while simultaneously transmitting them via the resulting technological channels.

Two weeks prior to the US and British air attack on Kuwait in January 1991, Jean Baudrillard published an article in *Liberation* describing similar observations, entitled 'The Gulf War Will Not Take Place'. He wrote that this conflict would not happen because the Western powers had internalised Cold War methods of deterrence to such an extent that they were no longer able to realise their power through literal force. The hyperreal media build-up, and the virtual technologies used by the military in lieu of the deployment of soldiers on the battlefield would lead to a virtual war, but no literal encounter. Hence, the simulacrum of war would work to deter the actual event. Obviously, the bombardment of the Iraqi military and civilian infrastructure, and the ensuing air and land assault broadcast via live news feeds, not to mention approximately

⁷⁸ Ibid.

⁷⁹ Paul Virilio, 'Speed Information: Cyberspace Alarm!', eds. Arthur and Marilouise Kroker, *CTheory*, (27th August, 1995) accessed via <http://www.ctheory.net/articles.aspx?id=72>.

100,000 Iraqi casualties would seem to contradict Baudrillard's analysis.⁸⁰ However, 'The Gulf War Will Not Take Place' stated the same critical observations as those discussed by Virilio on the mutation of war into a de-realised, virtual arena fuelled by the circulation of network information. Baudrillard published a further extended article on the subject in 1995, entitled 'The Gulf War Did Not Take Place', in which he elaborated on the idea of a virtual war, or pure 'image war' unlike any conflict that had gone before. Conflict in the Gulf represented a transformation of warfare because of our inability to verify what had actually taken place beyond the real-time representations broadcast by the news media. Like Virilio, he stated that due to this communication interchange, the strategy of war began to resemble a video game with the rules of engagement already prefigured in its virtual framework:

Since this war was won in advance, we will never know what it would have been like had it existed. We will never know what an Iraqi taking part with a chance of fighting would have been like. We will never know what an American taking part with a chance of being beaten would have been like. We have seen what an ultra-modern process of electrocution is like, a process of paralysis or lobotomy of an experimental enemy away from the field of battle with no possibility of reaction. But this is not a war, any more than 10,000 tons of bombs per day is sufficient to make it a war. Any more than the direct transmission by CNN of real time information is sufficient to authenticate a war.⁸¹

For Baudrillard, then, the transmission of real-time information authenticates a virtual war of images, while destroying our ability to assess them critically. The images reduce conflict to a theatrical exercise where the moral victor has already been decided, and the defining line between the real and representation erased. Similarly, James Der Derian concurs with Virilio and Baudrillard's concept of virtual info-war when describing how the simulations of conflict 'speed up' as the arms race 'slows down'. The velocity of these simulations causes images to take precedence over fact, in the same way that time has displaced geographical space in Virilio's analysis. Moreover, with the 'use-value' of nuclear arms being displaced by the de-centralised power of the information bomb, Der Derian concludes that the 'war of perception' deserves greater critical attention in terms of the 'uni-polar' global system emerging from the architecture of the Cold War. Der

⁸⁰ Simon Chesterman, 'Ordering the New World: Violence and its Re/Presentation in the Gulf War and Beyond', *Postmodern Culture*, 8.3, 1998, 5.

⁸¹ Jean Baudrillard, *The Gulf War Did Not Take Place*, (Sydney: Power Publications: 1995), 61.

Derian states that the uncertainties and disorientation of the virtual war game have developed to 'fill the void' left by Cold War bipolar opposition:

Was this a just war or just a game? For the winners, both: for the losers, neither. To suggest [...] that is could be both or neither simultaneously is to challenge the US effort to construct out of this war a new world order based on one truth, one winner, one loser [...] [T]his cyberwar is the result of the US effort to fill and to delimit the new void left by the end of the Cold War, the end of the old order, the 'end of history'.⁸²

By constructing a morality play based on the rules of deterrence, the war game, or cyberwar, recaptures the essence of the 'old order' and reconfigures Cold War strategy so that it may be simulated and disseminated via the virtual order. In terms of *Underworld*, then, this effort to fill the Cold War void provides a practical explanation for the military-technological omissions and interruptions throughout the text. The absence of overt military-technological associations, the exclusion of the fall of the Berlin Wall and the beginning of the Gulf War, each demonstrate that the virtual information system has superseded historical fact with unquantifiable associations and simulations devoid of context. The development of a new world order is never really asserted in the novel, because this order would constitute a replication of the power relations preceding it. Furthermore, the technological channels through which these global relations are formulated negate our ability to interpret them. This means they remain at the margins of political consciousness, and at the margins of the novel. To summarise, then, the Cold War in *Underworld* has not really ended in terms of symbolic and strategic motivation. Rather, it has 'mutated' into the de-centralised network information war where Cold War opposition replicates and spreads across the world-wide-web as infinite virtual conflict. Consequently, we need to consider whether the novel provides an alternative to this uncompromising networked 'machine-god'.

Technological Transformation

In the final pages of *Underworld*, DeLillo provides the link for a false website:

<http://blkdd.com/miraculum> (U: 810), thus fixing Sister Edgar's incorporation into

⁸² James Der Derian, *Antidiplomacy, Spies, Terror, Speed and War*, (London: Blackwell, 1992), 196-7.

cyberspace where the intimacies between military-technological hardware are hyperlinked to Roman Catholic faith. Ultimately, the connections of the web expose a 'false faith', the 'faith of paranoia' (*U*: 825) that contributes to the dominance of the military-industrial 'machine-god'. 'Das Kapital', which references Karl Marx's treatise on political economy and acknowledges the late-capitalist framework supporting the virtual global network, confirms the technological developments enabling an all-consuming war of information in cyberspace. However this closing section also outlines a certain transformative power amidst the connectivity, a kind of radical opposition to the 'spiritual god of technology' stemming from the subject's assimilation into the network. The deaths of Esmerelda and Sister Edgar commemorate the loss of the autonomous subject to the collective power of the technological system. The novel intimates through the inclusion of 'keystrokes' that Esmerelda's spirit links up with that of Sister Edgar, so that both may live on inextricably combined in cyberspace. Although these spirits are fused together and hyperlinked to the military-industrial associations of the net, their presence in the system facilitates a kind of hope for the future. The simulacrum of nuclear holocaust replicated on the H-bomb website, 'the flash, the thermal pulse' and the 'great gathering force off the 16-bit soundboard' that announces 'the superheated sphere of burning gas that can blind a person with its beauty, its dripping christblood colors, solar golds and reds' (*U*: 825), suddenly evaporates from the screen when another piece of coded information links from Sister Edgar:

A word appears in the lunar milk of the data stream. You see it on your monitor, replacing the tower of shots and airbursts, the detonations of high-yield devices set on barges or dangled from balloons, replacing the comprehensive text displays that accompany the bombs. A single seraphic word. You can examine the word with a click, tracing its origins, development, earliest known use, its passage between languages, and you can summon the word in Sanskrit, Greek, Latin and Arabic, in a thousand languages and dialects living and dead, and locate literary citations, and follow the word through the tunnelled underworld of its ancestral roots. (*U*: 826)

The hyperlinked word that interrupts the data stream of nuclear war, and in fact the final word of the novel, is 'peace' (a statement reminiscent of the ending of T.S. Eliot's *The Waste Land* with the inclusion of the Hindu blessing 'Shantih Shantih Shantih' meaning peace beyond all understanding) the ultimate spiritual and transcendental comfort in contrast with the repeated images of virtual thermonuclear war. The information war,

based on virtual replications of Cold War opposition, and simulated models of nuclear destruction, owe their game strategy and development to the logic of nuclear deterrence, a threatening arms race devoid of actual 'hot' warfare. In cyberspace, the 'detonation of high-yield devices' may occur, but as a virtual reality or simulation that replicates the 'false faith' of paranoia across the network. In metaphorical terms, then, it is the explosive charge of coded information, the threat of substitution of the actual by the virtual, and the loss of the individual that represents a new form of paranoia and hostility. Edgar's transformation within the network may constitute one kind of resistance in cyberspace, but it is in fact DeLillo's narrative engagement with technology that suggests a negation of the information bomb altogether. By creating a false website for inclusion in the text, DeLillo challenges the power of network technologies with a reinstatement of narrative authority and potential. The website may signify a node on the 'information superhighway', a potential technological 'accident' or 'interruption' enabling a war of knowledge, but here in the text it is narrative intervention that breaks the connectivity of the internet by linking it to nothing. Rather than the narrative being assimilated into the technologies it imitates, the network technologies become subordinate to the narrative, and the chain of associations connecting 'everything' to a military-industrial logic become null and void. The sub-textual interconnections that have intimated a military-technological trajectory from the Cold War to the contemporary war of information have interposed a 'politics of montage' in opposition with the dark 'under-history' of our late-capitalist technocratic society. Ultimately, the novel provides a techno-scientific 'rewrite' with which to challenge the simulation and de-realisation of the information bomb.

In this chapter I set out to approach the historical framework of *Underworld* from a different perspective to previous analyses, specifically by locating and investigating the gaps and breaks negating a complete linear narrative. Rather than focus on the text as an attempt to fill the fissures and interruptions left by the official historical record, I viewed the narrative as deliberately incomplete in accordance with a Cold War, or military-industrial, unconscious. Both *White Noise* and *Underworld* are focused upon this kind of historical unconscious. This is because DeLillo's novels fictionalise the disorientation resulting from ideological discourses that compromise coherent

relationships with the past. In *White Noise*, this took the form of an inability to critically interpret cultural and political data. This condition enabled the maintenance of a containment culture, and the creation of a collective subjectivity reliant on the apparent familiarity and security of containment identity. Throughout the narrative, a Cold War unconscious is experienced as unobtainable meanings and sinister associations on the periphery of the characters' conscious understanding. By the close of the novel this paranoid condition causes the psychological meltdown of central protagonist, Jack Gladney. It is only via an acceptance of the ambiguity beyond containment that Jack is able to restore personal equilibrium.

In my analysis of *Underworld*, I intended to demonstrate these breaks as critical indicators denoting a military-industrial subtext framing the characters' de-contextualised historical experience. Matt Shay's assertion in the novel that 'all technology refers to the bomb' proved crucial for this line of inquiry, by highlighting the Cold War military-industrial contexts ever present, but never really developed in terms of narrative chronology. By investigating the historical subtexts at the margins of the narrative, *Underworld* becomes the kind of interpretative text described by Fredric Jameson in the *Political Unconscious* as a 'symbolic action' that generates and produces 'its own context in the same moment of emergence in which it steps back from, taking its measure with a view toward its own projects of transformation'.⁸³ The subtexts, or Cold War unconscious, contained at the margins of the narrative prompt a response to the loss of historicity by politicizing the content of daily experience. In other words, by posing a narrative that reflects fragmentary historical representation, the novel initiates a literary dialogue concerning our re-writing, of the past. Moreover, the narrative enables 'projects of transformation' by drawing the 'Real' into its 'texture', and fashioning a symbolic reaction against the ideological structures denying historical clarity in present Real[ity]. Ultimately, the narrative is provided with the power to challenge ideological supremacy, and *Underworld* achieves this by negating the contemporary information bomb with the capability of narrative device. Although not as extreme in terms of revolutionary counter-force and narrative potentiality, this military-technological challenge is close to William S. Burroughs' fictional agenda in the Red Night trilogy.

⁸³ Jameson, *The Political Unconscious*, 80.

Underworld's historical subtext has also enabled a trajectory from early Cold War military-industrial innovation, toward the late-capitalist, post-Cold War order of information excess. The critical perspectives of Paul Virilio and Fredric Jameson have provided indications of what this 'New World Order' might entail. For Jameson, this encompassed US military and economic domination throughout the world. For Virilio, this signified the transformation of traditional forms of battlefield warfare and nuclear deterrence into an information war, based on the uncontrollable speed of communication technologies. This set of military-derived technological conditions may lead to the 'explosion of unlimited information', an information bomb equally as damaging as the threat of Mutually Assured Destruction (MAD) if left unchecked. These perspectives have provided critical leverage for this sub-textual analysis of *Underworld* but, in turn, this reading of the novel has fortified Virilio and Jameson's viewpoints with specific examples of the marginalised history of Cold War innovation. So, the military-technological trajectory drawn from the radio, satellite, television and networked computer technologies outlined in the novel reveals that the Cold War military-industrial complex has caused a kind of postmodern critical mass. Rather than degenerate and decline in the trans-political system, the military-technological innovations and economic rationale of the Cold War have fed directly into the information flows, conflicts and economies of a uni-polar global system.

Underworld, then, can be seen as expounding Jameson and Virilio's warnings about the dark underbelly, or underhistory of postmodernism. However, even though the novel's subtexts lead toward the information bomb, and hint at the virtual reproduction and dissemination of Cold War nuclear hostility, there exists a level of resistance not expressed in Jameson's and Virilio's analyses. Although the breaks and interruptions in military-technological representation demonstrate trans-political degeneration, DeLillo is able to use this fragmentation to present a balanced, albeit fragmentary, composite of 'public' and 'private' narrative histories. Furthermore, by incorporating the entwined spirits of Sister Edgar and Esmerelda into the vast web of associations on the internet, the novel initiates a stand against religious wrath with the capabilities of the technological network. This spiritual essence is reminiscent of DeLillo's observations in the aforementioned December, 2001 essay 'In the Ruins of the Future'. After the attack

on the World Trade Center, DeLillo became aware of the 'great skeins of technology' that are 'ever more complex, connective, precise, micro-fractional', the technologies that have replaced religious astonishment with the miracle of human technological achievement.⁸⁴ DeLillo acknowledges the dark military associations of technological supremacy enabling America to be the 'only superpower on the planet', but paradoxically he has also come to view this technocracy as the only safeguard against 'the old slow furies of cut-throat religion'.⁸⁵ The combined forces of technological capability and the humanitarian spirit, then, constitute a reconfiguration of the military complex into a counter-narrative of accomplishment in the face of ideological atrocity. *Underworld* uses similar processes of ideological reconfiguration to emphasise and resist our socio-historical malaise. In the end the novel entertains collective fascination and awe above and beyond military-technological connectivity.

⁸⁴ DeLillo, 'In the Ruins of the Future', accessed via <http://www.guardian.co.uk>.

⁸⁵ Ibid.

Conclusion: Don DeLillo and William S. Burroughs: Historical Neo-Realism or Utopian Escape?

As I have set out to demonstrate, Don DeLillo and William S. Burroughs both engage in fictional dialogues that challenge dominant Cold War textual representation. They investigate the impact of historical weakening on our understanding of the military-industrial framework underpinning the late-capitalist, or postmodern era. By using narrative as a means to reconsider fragments of the Cold War record, both novelists are able to embark on a rewrite of military-industrial history, while simultaneously reacting to symptoms of social disorientation.¹ However, DeLillo and Burroughs have markedly different approaches to this kind of narrative intervention, and as I shall clarify here, their fictional agendas contrast in terms of transformative capability and ideological intent.

For DeLillo, the neo-realist novel becomes the most effective means available for addressing the imbalances, inconsistencies and anxiety caused by our deteriorating relationship with public and private history: 'the novel which is within history can also operate outside it—correcting, cleaning up, and perhaps most important of all, finding rhythms and symmetries that we simply don't encounter elsewhere'.² In this sense, DeLillo sets out to engage with the late-capitalist historical 'unconscious' that is inaccessible to us, except as a narrative 'subtext' that contains the ideological structure of the 'Real'. This incorporation and re-writing of everyday social reality into the fictional text enables a critical response to Cold War historical weakening, because the text is able to insinuate and react to the cultural and political conditions causing this loss of 'manageable reality'.³

As discussed in Chapter One, in *White Noise* this insinuation takes the form of a fictional analysis of the 'energy waves' and 'incident radiation', resulting from an over-

¹ Fredric Jameson, *The Political Unconscious: Narrative as a Socially Symbolic Act*, (London: Methuen, 1981), 81.

² Don DeLillo's interview with Anthony DeCurtis, 'An Outsider in this Society', in *Introducing Don DeLillo*, ed. Frank Lentricchia, (Durham: Duke University Press, 1991), 56.

³ *Ibid.*, 48.

abundance of networked information and cultural data in the postmodern society.⁴ These subliminal or unconscious fragments of data have become detached from the military-industrial relations fortifying all aspects of national life. Therefore, the subject is prone to a communal Cold War unconscious that impedes interpretations of the cultural and political milieu. As a consequence of this inability to read the cultural data stemming from the military-industrial complex, main character Jack Gladney senses unconscious threats and ambiguities encroaching on the perimeters of his Cold War containment identity. Eventually, Jack's reliance upon the 'false consciousness' of a perpetually replicated containment culture leads to a psychological meltdown of grand proportions, whereby the difference between simulated contingency and hazardous event become indefinable. Although DeLillo's frequently satirical narrative replicates the simulations and postmodern hyperreality that divorce the subject from any meaningful sense of linear history, it still represents a realist reconsideration. His narrative internalises and reflects the crisis in Cold War historical interpretation, in order that a critical dialogue may be initiated on the pitfalls of our unconscious. This realist approach is strengthened by the fragmented resonances DeLillo creates for particular Cold War events. In *White Noise* this occurs with the alignment of the 'airborne toxic event' to the Three Mile Island reactor incident, and with the resonance between the SIMUVAC simulated evacuation and the Federal Emergency Management Agency's nuclear contingency planning. Hence, the narrative is steeped in the real, and the limits of the ideological consciousness of containment. From this perspective, *White Noise* becomes a narrative means to rewrite the propagation of a false containment consciousness in such a way that we may review the cyclical links between the military-industrial bases, cultural output and historical experience.

Similarly the narrative fabric of *Underworld* is neo-realist in terms of the patchwork of vast and varied histories, both public and private, that make up its fragmented and open-ended structure. Like *White Noise*, it can be considered a rewrite of the Cold War unconscious which is designed to reconcile recent military-industrial history with its interpretative frameworks. As self-reflective historiographical metafiction, the novel seeks to 'reassert the political content' of the present, by

⁴ Don DeLillo, *White Noise*, first published 1982, (London: Picador, 2002), 37-38.

demonstrating the gaps and interruptions in our understanding of Cold War military-technological innovation. These innovations, from radio to the internet, have shaped the contemporary network information loops and cultural materials defining disoriented social reality during the twentieth-century. Therefore, as I stated in Chapter Four, *Underworld* qualifies as a 'sub-textual' reconsideration of American 'under-history'. This is because the novel continually produces historical resonances in the unconscious gaps that signify our social disorientation. Although DeLillo's military-technological subtext is not made explicit in the narrative, it nonetheless exists as an undefined schema similar to those used by James Joyce to unify and categorise the chapters of *Ulysses*.⁵ *Underworld* is a fictional account of the ways in which the Cold War unconscious exists on the margins of contemporary consumerism, media information flows, and domesticity. Consequently, instead of the reader 'consuming' these network links in some mechanical and unsuspecting manner, the novel forces the reader to work to produce them, thereby initiating a critical response to the postmodern saturation of cultural life. This type of metafictional collaboration between reader, author and text, then, resists the cultural consumption identified by Fredric Jameson in *Postmodernism* because it requires that the reader participate 'intellectually' and 'imaginatively' in critical processes of historiographical co-creation.⁶

By charting this unconscious via the representational gaps in over forty years of Cold War and cultural event, from the World Pennant baseball game to the detonation of the first Soviet atomic test, DeLillo can suggest that 'all technology refers to the bomb'.⁷ Through these military-technological subtexts, the novel draws the real world into its structure; thereby articulating a reader reaction to the debilitating unconscious trajectory from Cold War nuclear development to the networked dissemination of the contemporary 'information bomb'.⁸ For DeLillo, then, realist fiction should work to restore 'a sense of the importance of daily life and ordinary moments', by finding 'a kind of radiance in dailiness. Sometimes this radiance can be almost frightening [...] that's something that has been in the background of my work: a sense of something

⁵ Joyce, James. *Ulysses*, first published (Oxford: Oxford University Press, 1993), 980pp.

⁶ Linda Hutcheon, *Narcissistic Narrative: The Metafictional Paradox*, (London: Methuen, 1984), 7.

⁷ Don DeLillo, *Underworld*, (London: Picador, 1998), 467.

⁸ See Paul Virilio's interview with Louise Wilson, 'Cyberwar, God and Television, *CTheory*, eds. Arthur and Marilouise Kroker, (12th January, 1994), accessed via <http://www.ctheory.net/articles.aspx?id=62>.

extraordinary just beyond our touch and beyond our vision'.⁹ Although the Cold War unconscious in DeLillo's novels at times inspires this kind of fear and dread, fundamentally it is intended to redress our relationship with historical ambiguity.

Conversely, Burroughs considers the production of the narrative text to be a method of revolutionary counterforce to be used against the military-industrial, trans-political control apparatus directing the limits of ideological consciousness. Rather than use the novel as a channel through which to redress the breaks and fissures in linear historical representation, Burroughs instigates methods of textual resistance in order to challenge the military-industrial communication networks causing collective subjectivity and social disorientation. As discussed in Chapter Two, his Nova trilogy and early textual routines stage a 'guerrilla' assault on the antagonistic 'game planet' apparatus responsible for the military-technological enhancement of the Cold War. By targeting the 'word virus' with 'cut-up' experimentation, Burroughs attempts to undermine the control machinery responsible for postmodern social 'de-realisation'.

Furthermore, he embarks on a narrative quest that diverges distinctly from DeLillo's fictional appropriation of history. Throughout Burroughs' writing projects, the fictional narrative constantly incorporates textual fragments of the Cold War, from the spliced newspaper headlines and government agency rhetoric incorporated into the cut-ups and fold-ins, to the resonance he creates for the military-technological conditions of Mutually Assured Destruction (MAD). However, rather than create a linear narrative chronology for these Cold War fragments that are intended to restore our relationship with the ideological subtexts of the past, Burroughs re-fashions them into a Cold War counter-history to replace our present experience of social reality: 'History is reversible in the sense that it has ceased to exist. I think nobody knows it yet'.¹⁰ Therefore the Red Night trilogy moves away from the 'guerrilla semiotics' and textual revolt of the Nova novels, to embark on narratives that facilitate constantly evolving fictional worlds of possibility. In this sense the Red Night novels use the breaks in historical consciousness as a springboard for performativity. These are worlds in which Burroughs would like to

⁹ DeLillo's interview with Anthony DeCurtis, 'An Outsider in this Society' in Lentricchia, *Introducing Don DeLillo*, 63.

¹⁰ Burroughs 1981 interview with Sylvère Lotringer, 'Exterminating' in *Burroughs Live: The Selected Interviews of William S. Burroughs*, ed. Sylvère Lotringer, (New York: Semiotext(e), 2001), 543.

exist, worlds where the techno-scientific innovations of the military-industrial complex are subject to a kind of reversal that makes them the bases for new types of counter-communities, such as the pirate commune in *Cities of the Red Night*, the Johnson Family in *The Place of Dead Roads* and the Natural Outlaws in *The Western Lands*. Moreover, this techno-scientific seizure aims to eclipse Cold War nuclear opposition and the monopolisation of scientific research by 'vested interests', by re-writing them into an over-arching assault on the control system. Two particular examples of this kind of counter-historical rewrite include the resonance Burroughs creates in *Cities* for the radiological experimentation carried out by US government agencies during heightened Cold War antagonism, and the covert biological offensive carried out by Kim Carsons and the Johnson Family in *Place*. The military technocracy, known as the 'Pickle Factory', is seen to carry out this kind of covert biological/radiological testing in *Cities*, and at this early stage in the trilogy the only means of resistance available is the bodily liberation initiated by viral contagion. However, Kim's biotechnological experimentation in *Place* consists of a total takeover of Cold War military research initiatives that aim to destroy the tenets of control with a reversal of biological warfare.

With this narrative revolt set in motion by the end of *Cities*, Burroughs' band of outlaw characters are free to re-direct bio-technological research facilities toward the creation of new modes of being based around genetic engineering, cloning, cybernetic systems theory and half-formed, posthuman organisms in a perpetual state of becoming. In this sense, the [post]human body is subject to the same process of reconfiguration as the military-technological history engendering biotechnological research. As I have demonstrated in Chapter Three, each of these methods of bodily enhancement/alteration have originated as government-funded or military research initiatives intended to enhance and perpetuate the 'machinery of war'.¹¹ Therefore, Burroughs' counter-historical possibilities in *The Place of Dead Roads* and *The Western Lands* represent a historical rewrite of the Cold War designed to facilitate the conditions for a 'non-body route', or bodily transcendence. Ultimately, it is Burroughs' mission to use fiction as a means for initiating escape from the planet's 'plagued' system:

¹¹ Paul Virilio, *Pure War*, (New York: Semiotext(e), 1983), 27.

The point is seeing a number of sides to any question, even questioning the whole human endeavour. Where do they think they're going as a species, knowing where other species went. They don't think about things like that at all. It's not too healthy to think such things.¹²

Burroughs' fiction of possible worlds in becoming signify a rejection of linear historiography and human development altogether. Rather than reconcile our fragmented historical and ideological consciousness, he uses counter-historical breaks and interruptions as the basis for emergent and developing 'zones' or worlds of potentiality. These worlds merge time and place so that the past is subject to perpetual 'rewrites', and the species to continual reconfiguration. Consequently, the bases of control are endlessly subverted, and the characters are free to embark on their limitless posthuman quests for bodily and planetary escape:

Maybe our best hope is to get away from this planet with its abysmal cycles of over-population, depletion of resources, pollution, and escalating conflicts. Now that's going to require biological alterations in the human structure that would make us able to exist in space—that or we go out-of-body route, which is probably more practical.¹³

As far as Burroughs is concerned, this fictional escapism is essentially utopian in nature, the kind of utopianism I aligned with analyses by Fredric Jameson and Ihab Hassan in Chapter Three. This constitutes a rejection of the kinds of bodily constraints, social relations, cultural containment and political de-realisation generated by the military-industrial machinery of control. Therefore, Burroughs' fictional project maps the limitations of our ideological consciousness in this world and reconfigures it to suggest the potential utopian freedoms developing in the fictional realm.

Both DeLillo and Burroughs have been subject to criticism concerning their approaches to counter-historical resistance. In the case of Burroughs, this has taken the form of an argument regarding the relative instability of his fictional possible worlds as continually developing and incomplete zones. For Brian McHale, these half-formed fictional potentialities fail to provide a convincing allegorical or symbolic structure to counter and replace the historical oeuvre of this world, and so ultimately they have failed

¹² Burroughs 1981 interview with Sylvère Lotringer, 'Exterminating' in Lotringer, *Burroughs Live*, 539.

¹³ Burroughs' 1987 interview with Jim McMenamin and Larry McCaffrey, 'The Non-Body Route', in *ibid*, 697.

as integrated allegorical interpretations.¹⁴ However, as I outlined in Chapter Two, to focus upon the instabilities of these fictional possible worlds is to misinterpret Burroughs' subversive intention. The fact that these zones remain in a constant state of developmental flux and instability provides them with their ability to challenge and counter the control machinery. As arising narrative potentialities that reconfigure and satirise fragments of the Cold War military-technological precedent, they have the capability to internalise, reverse, and finally, transcend contemporary conflict and control in favour of an uncharted and uncultivated narrative escape.

Aesthetic questions have also been raised about the narrative reconsideration of Cold War history and postmodern culture that structure DeLillo's fiction. As I suggested in Chapter Four, these critical discussions focus on the fact that, DeLillo's writing (particularly *White Noise* and *Underworld*) refuses to resolve and coalesce, and that by internalising this kind of novelistic deconstruction they capture the quintessence of postmodernity. However, as Phillip Nel and Timothy Parrish emphasise, the resulting dialectic surrounding modernism, postmodernism, history and mass culture, leads to suggestions that DeLillo's narrative production is absorbed by the cultural and historical forces he chooses to fictionalise.¹⁵ In response to this kind of aesthetic debate, DeLillo argues that his novels remain repetitive, fragmentary and incomplete in terms of thematic resolution because they convey the 'secret patterns' and 'ambiguity' that encroaches on our lives. He states that: 'I think my work has always been informed by mystery, the final answer, if there is one at all, is outside the book. My books are open-ended. I would say that mystery in general [...] is something that weaves in and out of my work'.¹⁶ In this sense, DeLillo internalises the cultural fragmentation and historical dislocation resulting from postmodernity in order that he may spotlight the unconscious 'mystery' and 'dread' at the periphery of our cultural systems. Consequently, DeLillo's novels force the reader to be productive in the way that they make him/her render the meaning and significance to fill in the narrative gaps. By leaving his novels 'open-

¹⁴ Brian McHale, *Postmodernist Fiction*, (London: Methuen, 1987), 143.

¹⁵ See Timothy Parrish, 'From Hoover's FBI to Eisenstein's *Unterwelt*: DeLillo Directs the Postmodern Novel', *Modern Fiction Studies* 45.3 (1999), 697, and Phillip Nel, 'A Small Incisive Shock: Modern Forms, Postmodern Politics, and the Role of the Avant-Garde in *Underworld*', *Modern Fiction Studies* 45.3 (1999), 725.

¹⁶ DeLillo's interview with Anthony DeCurtis, 'An Outsider in this Society', in Lentricchia, *Introducing Don DeLillo*, 55.

ended' in this way he is able to reflect, and therefore re-textualise, the historical unconscious causing subjective detachment from the military-industrial complex *White Noise* and *Underworld*, then, are not simply reflections of the postmodern 'waning' of historical effect. Rather, they signify a symbolic dialogue that fictionalises the detrimental conditions of our Cold War historical unconscious, in order that we may achieve a degree of critical distance with which to reassess our relationship with these fragments of the past.

Both DeLillo and Burroughs, then, use the gaps, breaks and incompleteness of the Cold War historical record as a means to fashion their fragmentary narratives of military-industrial resistance. For Burroughs this rewrite is a means for fictional potentiality and escapism from global conflict, and for DeLillo it constitutes a way of replicating and responding to the ideological conditions of contemporary culture. Although markedly different in terms of their approach, DeLillo and Burroughs use traces of the military-industrial system as a base for their narrative reconfigurations of history. However, rather than simply absorb and refashion Cold War historiographical mapping, their ongoing criticism and engagements with the intimacy of military technology and networked society reveal a new critical perspective on postmodernism. As I stated at the outset of this thesis, Fredric Jameson's *Postmodernism* speculates that the associations between military and technological information networks are symptoms of the postmodern situation. Conversely, I am suggesting that these military and technocratic links are not symptomatic of postmodernism; on the contrary, they provide the grounding for postmodernism to flourish as a cultural dominant. This reorientation enables a reassessment and consolidation of postmodern theory more generally. To demonstrate this, I have elaborated a military framework for Jean Baudrillard's assessment of the 'obese' technological systems leading to our social de-realisation. Furthermore, I have aligned Paul Virilio's military-technological analysis of the trans-political system with the postmodern aesthetic nuances conveyed via literary texts. The fictional examination and assessment enabled by DeLillo and Burroughs gives critical purchase to this discussion, because both authors recognise the historiographical fragmentation taking place as a result of military-technological capability. These authors acknowledge the speed and dissemination of military-derived information networks and

domestic consumer technologies, and they fictionalise the postmodern conditions occurring as a consequence. Therefore, DeLillo and Burroughs not only embark upon narrative quests to resist and resolve our social disorientation, they also provide the means for a critical reconsideration of postmodernism as the result of Cold War military escalation.

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