Figure 3 “The Eiffel Tower as a Gigantic Lightning Conductor” (Loppé, 1902)
I think it's very true that we are living in a science fiction novel that we all collaborate on, and it's because everything that science fiction was about through its historical named period, the twentieth century, has kind of come true. And also we live in a world that is so intensely structured by science and technology that we can't get out of it. If we were to get out of it it would still be a science fiction move, the retreat to the farm. So it's hegemonic, you can't escape it, we're in that world created by science and technology. And also there's this intense sense of futurity, in that if you opened up your newspaper or laptop tomorrow and it said, "They've cloned six South Koreans successfully and they're all named Kim," you would believe it, there would be no surprise there. Anything could happen. You could say, well, we just got a signal from Alpha Centauri, there are intelligent aliens there, they sent us the code for pi and the Pythagorean Theorem. There's no reason to disbelieve that, either. So we live in this world of anticipation of strangeness, of change, rapidly accelerating change.

01 :: 01 Data Spaces: A Guide to the Cyber City

A Klee painting named ‘Angelus Novus’ shows an angel looking as though he is about to move away from something he is fixedly contemplating. His eyes are staring, his mouth is open, his wings are spread. This is how one pictures the angel of history. His face is turned toward the past. Where we perceive a chain of events, he sees one single catastrophe which keeps piling wreckage and hurls it in front of his feet. The angel would like to stay, awaken the dead, and make whole what has been smashed. But a storm is blowing in from Paradise; it has got caught in his wings with such a violence that the angel can no longer close them. The storm irresistibly propels him into the future to which his back is turned, while the pile of debris before him grows skyward. This storm is what we call progress.

- Walter Benjamin in Theses on the Philosophy of History (Benjamin, 1968, p. 257)

Bruce Sterling describes the dark euphoric temperament as having two “flavours”, a low end and a top end – *gothic high-tech* being at the top end and *fevala-chic* being at the low end. He utilises contemporary political and technological figures to personalise this assemblage – namely Barak Obama, Nicolas Sarkozy and Steve Jobs. “These are Gothic High-Tech figures, people who position themselves in the narrative rather than building any permanent infrastructure... They’re cheerleaders, they’re not leaders. They’re cheerleaders” (Sterling, 2009). This cheerleading feeds neatly into the premise of the techno-futurist narrative, in which the corporatisation of information and personal communication technologies has confirmed the perverse fantasy of the utopian promises made in the 20th Century technological space and instead replacing it with the new millennia’s non-future future. As Sterling derides, “they’re positioning themselves in the narrative rather than building any permanent infrastructure” (Sterling, 2009). These cheerleaders, these non-infrastructure-capitalists, compliment a narrative in which history is negated and tangible realities – and physical space – are annihilated by high-tech devices and networked services. The antithesis of the future as networked utopia is evidenced by a range of media content, communication design and media art content that explore the darker tendencies in the cultural milieu. The portrayal of apocalyptic end-times in popular American cinema, of wanton destruction on a massive scale by technological agents – alien, viral, nuclear or other – are extreme versions of this yet vividly display a totalising anxiety about the future and the trauma of our most recent past. I examine a selection of
these films in detail in the latter half of this thesis and relate this analysis back to my own media art practice at various points in the text. Relevant in a wider context to this discussion, is the personal gothic tragedies of films such as *American Beauty* (Mendes, 2000), *Ice Storm* (A. Lee, 1997), *Donnie Darko* (R. Kelly, 2001) and *Virgin Suicides* (Coppola, 1999), and more recent episodic television series such as *Six Feet Under* (Ball, 2001), *The Sopranos* (Chase, 1999), *Breaking Bad* (Gilligan, 2008), *Mad Men* (Weiner, 2007) and *Dexter* (Cuesta, 2006) in which the internal space becomes absent, damaged unrecognisable. In these narratives a particular type of western exceptionalism is replaced with a very personal darkness. In almost every case a lead character’s personal anxiety is eclipsed by their despair for the socio-political structure within which they operate. Think Tony Soprano’s frequent laments in Dr Melfi’s office, Dexter Morgan’s “dark passenger”, Walter White’s economies of scale and Don Draper’s complicity in perfecting the sales pitch for American industry. These all represent moments of personal apocalypse, the realisation of unfolding disasters becoming the backbone of the narrative thrust. Each struggle depicted with the exceptional clarity of their more epic cinematic cousins. On one hand the end of the human race in wide screen CGI technicolour and on the other a macro examination of the gradual loss of what it feels to be human.

That’s the situation on the ground. People ask where did the future go? Where are these glamorous versions of the future? ... we’re deliberately choosing to move away from that and into a non-twentieth century space. We’re moving into a situation with Generation-Xers in power, in a depression. A depression where people are afraid of the sky (Sterling, 2009).²

Here “on the ground” a stasis of present-future reality persists in the form of a cruel type of repetition in which we skip the agony that comes with the moment of our destruction by previewing it endlessly from multiple angles on multiple screens. The Twin Towers, the Statue of Liberty – New York New York – the metaphorical epicentre of our ultimate extinction replayed, re-edited and re-looped on Forever Vision. And yet we endure. Stepping off the edge and falling back to the Earth unharmed yet un-dead strung out on the sofa in our digital favela. Bewitched by the eternal live stream of the conflict between technological virtuality and the demise of the natural world we

² Relationships with the sky, mechanical flight, trauma and urban decay - or semi-permanent futures – will permeate this text as they do Sterling’s narrative. It is instructive that in his description of gothic high-tech’s low end “flip side”, favela -chic, Sterling uses both the network and the sky to sketch the scene for our understanding of the paradoxical nature of the low-end trope: the ironic euphoria of the downmarket Gen-X cyber city squatter. “You have lost everything material, everything you built and everything you had, but you’re still wired to the gills! And really big on Facebook” (Sterling, 2009). He likens MySpace to Brazilian sqalettes, high rise favelas stacked into the sky, “a kind of see-through building” in which the internal structure has been built - girders of steel, columns of cement – sometimes 80 stories high and although they are never completed they are occupied by squatters.
watch Lady Liberty’s torch sink beneath another wave, the asteroids raining down from the sky, a rogue computer virus eliminating history – the dark euphoric fall has many visual icons.

I will define dark euphoria on Sterling’s terms – an involuntary episode characterised by an overwhelming sense of falling from a precarious height – through the millennia, back towards earth, catching glimpses of history and memory as they hurtle past us, through us - into the vast archive of digital objects. While gothic high-tech is perhaps a more malleable term representing the anxiety and the uncertainty that cultural artefacts and their technological apparatus leave behind. Gothic high-tech is very specific to the decades which straddle the millennia. It is a contemporary phenomena – neo-gothic if we were to compare it to classic gothic tropes – a personal evolving anxiety. It is more of an operant than a condition with respect to the parameters of this discussion. Conversely, the dark euphoric temperament Sterling outlines is a deeply externalising force; it could be read as a scene, a vista, a plot point – an image. Dark euphoria is not exclusively wedded to the technological – moments no doubt abound in the disciplines of art, politics, history and war – but most certainly appear regularly in the broader western capitalist traditions that intersect with the techno-cultural narrative.3 I focus on that narrative here. The link Sterling makes is explicit between the dystopian experience of an entire generation and the futurist techno-cultural narrative of the corporation.4 For, in the coming dark euphoric decade:

... things are just falling apart, you can’t believe the possibilities, it’s like anything is possible, but you never realized you’re going to have to dread it so much. It’s like a leap into the unknown. You’re falling toward earth at nine hundred kilometres an hour and then you realize there’s no earth there. That’s a dark euphoria feeling. It’s the cultural temperament of the coming decade (Sterling, 2009).

The visual iconography of this descriptor has a strong presence in the present-future narrative of the new millennium’s first two decades; from Richard Drew’s 9/11 image The Falling Man to the rotoscoped silhouette of Don Draper falling to the streets of Madison Avenue in the opening sequence of television series Mad Men. The harrowing notion of falling – down into the steel concrete mesh of the city, down into the grinding cogs of a broken paradigm – is writ large in the contemporary vision stream. Most spectacularly perhaps in the often repeated motif of the

3 Technoculture is a broad term that encapsulates the accumulation of technological invention and mediated culture – in a mostly western context – as society lurched through the 20th century towards new technological structures, new methods of cultural production and critically new complexities of informational embededness.

4 More commonly referred to as ‘Gen X’, Sterling alludes to the generation for whom the full manifestation of the trauma of the dark euphoric moment is encountered at the intersection of these two cultural narratives. His speech was delivered in 2009 his audience were, according to the organiser Thomas Madsen-Mygdal, most probably on average in their mid-thirties, “people who grew up with grand wishes for the internet, etc. and came to see wars, etc. instead” (Madsen-Mygdal, 2014).
plummet back towards the Earth – or the remnants thereof – back to nature, into the arms of its virtual dreamscape. Instead of playing witness to the fall, we are actually experiencing it firsthand. These episodes are most explicitly rendered in the steady stream of return to Earth films which have dominated the box office in recent years, beginning with the green shoots amidst the trash piles in WALL-E (2008) and the figurative origin parable of Avatar (2009) to the more recent After Earth (2013) in which the nurturing symbolism of Mother Earth has been reclaimed by a vengeful predatory cousin. In these dystopian future worlds there is a deliberate act of returning – to equalise, to stabilise, to set the record straight and in the case of Oblivion and Elysium (both 2013) to uncover a latent conspiracy and to disrupt surrogate systems of control. The act of falling itself is explicit in the dystopian analogies of The Man of Steel, Star Trek into Darkness and most recently Gravity (all 2013). Here the vehicle of flight, the apex of futurist space exploration becomes the broken Ark of misplaced innocence delivering its human cargo from the perils of supersonic flight back down to the virgin soil like chunks of molten rock spitting from the sky (see Figure 4).

As I shall establish, these epic dystopian canvases are the end game in a long narrative counterpoint to the Futurist myth making of millennial technoculture. In one vein of storytelling there is light, chrome, sustainable architecture, Nordic pine and touch-screen comfort and in the other a gratuitous mega-image-loop of an evolving darkness. Sterling articulated this well at Reboot 11 when he observed the obvious contradiction of the Utopian notion of “progress” and the very dystopian reality of the present-future space:

Everybody for 200 years, almost since the twelve hundreds have known what progress means. They know what it means to be progressive and they know what it means to be futuristic. You get more scientific knowledge, you create more tools, make more jobs, you master nature, you get more power, cheaper power, you struggle for a better life for your children, you’re looking for health, prosperity, material security, shelter, bigger, faster, stronger, knowing more. Everybody knows that’s progress. That’s not what we’re going to get. The actual objective situation looks more like this: No money, scarcity, financial collapse, collapsed states, general precarity, an energy crisis, low intensity global warfare, and a rapidly advancing climate crisis (Sterling, 2009).

Each of these conflicting parables have the same starting point deep in the beginnings of the 20th Century, and each begins and ends with objects in the sky. It is our complex relationship to the sky – as anxiety and fantasy – that is so emblematic of our uneasy relationship with technology. Mechanical flight, the act of falling through space and our fascination with height in architectural form is a recurring motif in this narrative progression. Indeed the conquering of the problem of mechanical flight and the capture and display of the moving image were the grand technological precursors to what followed: The construction of the Eiffel Tower and the Futurist’s depiction of
manned flight; the scaling of buildings by heroic beasts and the mediated destruction of planes and national monuments; the giddy first person point of view vision of super heroes in full flight; the snapshot of the Falling Man and the charred wings of the Angel of History. The synergies between height, flight and the image are all intrinsically linked to the gothic high-tech unravelling of our past through the prism of a manufactured future-scape.

Sterling describes an approaching dark euphoria and our passage through it but his “leap into the unknown” does not represent an ending; it perhaps best demonstrates via the act of falling, an endlessness. A state which Slavoj Žižek refers to as the dystopian horror of an unending “utopia” of things (Mossop, 2011). The thrill of the fall, the titillating view from on high, one’s weight and form equal only to the velocity at which we hurtle through space and time albeit without the fulfilment of self-annihilation. Instead the end would appear to be happening to someone else, somewhere else – the fall is virtual – a safe cultural fantasy. The Falling Man however, did make impact. We live the velocity of his exit approach endlessly and yet we never bear witness to the pulverising end. Instead the climax is left to our darker imaginings – a gothic high-tech moment deeply felt but never seen.

In his essay, Anorexic Ruins, Baudrillard states that, “everything has already become nuclear, faraway vaporised. The explosion has already occurred; the bomb is only a metaphor now” (Baudrillard, 1989). Foreshadowing the final simulacra of disconnect he would canvass when observing Gulf War 1.0 and 2.0’s mediated re-runs of infra-red fire fights, combat vapour and the endlessly victorious yet endlessly defeated soldier, Baudrillard precedes Virilio and Žižek’s critiques with the concept of the “weak event”. This is important, as the metaphor for nuclear annihilation has a deep history in the 20th century – less as a documented event but rather as an embodiment of fear and anxiety of an imminent future event but nonetheless a hollow prophecy. The failure of the Cold War to produce the final apocalypse left a distinct vacuum from which all subsequent equations seem somewhat dull and diluted. The immediacy and foreboding of the Cold War’s 1st Act during the 1950s and 1960s gave way to the pantomime of Act Two: the 1980s. Here the virtual battle is the only battle the narrative has left: Reagan’s Hollywood bravado and his SDI dreams (aka the Star Wars missile shield, 1983); Stallone’s virtual superpower confrontations in Rocky IV (1985) and Rambo: First Blood Part II (1985) and the Don Simpson produced Top Gun (1986) which represented the technological fulfilment of the absent dog fight between East and West. Similarly other late 20th Century manifestations of encroaching doom receded with each passing decade. The oil crisis of the

5 Baudrillard has been criticised for his over simplification of these so called “weak events” (the fall of the Berlin Wall and the two Gulf Wars). However, for purposes here, the term “weak events” is helpful in describing the small micro-steps notions of fear, terror and destruction have taken in the background of the antithesis of this narrative – the techno-cultural ambitions of the 20th century’s Utopian dreamscapes.
1970s was an engineering shortcoming and geographical skirmish rather than the end of the fossil fuel glut, the AIDS virus was more personal tragedy than global epidemic, the LA Riots were the exposure of a brutal truth yet largely suppressed with brutal force, the Seattle riots were a mobilisation which failed to evolve into a movement, Y2K was either an elaborate industry invention or a nervous miscalculation, and the tumble of dotcom stocks was a protracted whimper rather than a wholesale crash which nonetheless precipitated the US economy’s slow ebb towards another non-descript recession and the reality of a new global century. All of these events are, by Buadrillard’s definition, weak events, relative only to the background noise of their particular epoch of hysteria. Even then, these are more localised hysterias globally mediated, rather than the high-definition all-consuming end of days scenarios which constitute the shrill background noise of the new millennia.

9/11 however, was a “strong event” – for Buadrillard and the global audience – a highly visible evocative disruption to the signal. In a classical gothic sense, we are left with an ache, an anxiety, a palpable uncertainty for the present and the future. Between the dense haunting enclosure of the accumulated remnants of the 20th Century and the foreboding condition of the external opening out of the new millennia, the dark euphoric moment meets its apex in 9/11. Here in this hyper-reflexive space, the war/s continue, fragmented and geospacially agile, the air is thinning, discoloured, punctured and mega-scopic, water is falling and rising simultaneously like the encroaching walls of the Death Star’s garbage compactor. We are told that we have little choice but to call upon the machine to facilitate our escape from these collective ruins of our most recent techno-futurist fabrications. In other words, we must utilise the processes of a machine vision of ourselves and our networked landscape and author a narrative that reaches beyond the end and placates our embedded fears and anxieties.
about the present’s endlessness. We do so in order to overcome the spectre of the “ghost-like traces” of the past which have seemingly so darkened the promise of the zeitgeist (McNeil, 2011). Into the breach then steps the corporate futurists with glossy visions of a sanitised technological dreamscape free from the horrors of the universe beyond the screen.

This text will seek to map out this transitional territory by examining the converging aesthetic parables of the millennial narrative – the dark, predominately digital, aesthetic of contemporary media arts and the concurrent marketing of a technological engagement with a colourful vibrant future via dense and at times contradictory mediascapes. Here the eulogising of technology, through manifestos of light, colour and pixels, of urban spaces and information flows, belies the fact that the sales pitch by governments, corporations and cybernetic theorists has instead manifested a darker shade in the cultural fabric of contemporary media art production and corporate image making.

This thesis should not be read as a lesson in art history or the economics of media distribution but rather an examination of the cultural artefacts. There are dramatic links between machines for art making and the undoing of the technological narrative which mythologises such machines through the objects of cultural production. It is the duality of the machine – of the digital, of the simulation – as both destroyer and saviour that lies at the heart of this story. With this in mind, the narrative arc of the 20th century can be framed as a cycle of technology-driven art making that intersects with the technological sublime and the aesthetics of Modernist idealism. Yet these technological apparatus also possess more slippery modes of disruption – practices of surveillance, the appropriation of fiction and fantasy for political and military purposes and the dramatic reconfiguring of the techno-futurist ideal.

Although anxiety and trauma certainly do influence proceedings, it is not possible to embellish this text with a deeper examination of psychology as derived from wider social and environmental effects. However, the conditions which precipitate these effects should be understood to weigh heavily in the background and that it is the audience that the techno-cultural narrative plays to who is most at risk. Obviously, when we think of apocalyptic futures, we think of environmental, nuclear, cosmic, microbe or alien annihilation and when we consider dystopian links to our present reality we cannot help but recognise catastrophic weather events, ever diminishing resources and religious fundamentalism. And when we contemplate trauma from a localised perspective it has a more immediate effect: we can envision the collapse of the global economy in all of our possessions, the pressures of over population in the streets, the dumbing down of public discourse and the threat of cybercrime on our screens.
The Cambridge Centre for the Study of Existential Risk (CSER) is a research institute established in late 2013 with seed money from Jaan Tallinn, the founder of Skype, to provide “politicians and the public with a list of disasters that could threaten the future of the world” (Price et al., 2013). It lists the immediate threats facing humanity beyond the more commonly regarded risks from nature (such as asteroids and volcanoes) as the threats posed by humanity’s technological power:

Specific technologies that scientists and writers of great distinction have raised concerns over include artificial intelligence, biotechnology, and nanotechnology (e.g., von Neumann 1958; Sagan 1983; Parfit 1984; Gott 1993; Hawking 2010; Rees 2003; Posner 2004; Matheny 2007). A more general concern relates to our increasing reliance on limited resources and fragile, increasingly interconnected systems (Price et al., 2013).

Leading the CSER program is astronomer Martin Rees along with a distinguished cohort of scientific luminaries such as Peter Singer, Huw Price and Stephen Hawking. Prior to the Centre’s establishment at a meeting of the British Science Festival in a speech entitled “We Are In Denial About Catastrophic Risks” Rees summarised both the immediacy these threats posed and the distance at which society chooses to keep them:

In a modern, efficient world, we no longer stockpile food. If the supply is disrupted for any reason, it would take about 48-hours before it runs out and riots begin... The wide public is in denial about two kinds of threats: those that we’re causing collectively to the biosphere, and those that stem from the greater vulnerability of our interconnected world to error or terror induced by individuals or small groups... Nuclear weapons are the worst downside of 20th century science. But there are novel concerns stemming from the impact of fast-developing 21st century technologies. Our interconnected world depends on elaborate networks: electric power grids, air traffic control, international finance, just-in-time delivery and so forth. Unless these are highly resilient, their manifest benefits could be outweighed by catastrophic (albeit rare) breakdowns cascading through the system (Rees, 2013).

CSER is clear about what these risks are, as Rees highlighted again and again in his speech, there is a strong man-made technological component – thermonuclear war, electronic contagions and misguided geo-engineering, and ecological factors – conflicts over energy and resources, viral epidemics, rapid rises in global temperatures and other runaway climate effects. Even the CSER website’s title banner makes their narrative explicitly a digitally rendered apocalypse with animated images of computer code, the Ebola virus, the internet, rogue comets and snarling galaxies (see Figure 8). But Rees also warns against the complacency that springs from the exaggerated media simulation:

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All too often the focus is parochial and short term. We downplay what’s happening even now in impoverished, far-away countries and we discount too heavily the problems we’ll leave for our grandchildren. In a media landscape oversaturated with sensational science stories, "end of the world" Hollywood productions, and Mayan apocalypse warnings, it may be hard to persuade the wide public that there are indeed things to worry about that could arise as unexpectedly as the 2008 financial crisis, and have far greater impact (Rees, 2013).

A recent study funded by NASA and carried out by the Godard Space Flight Center determined that such outcomes would not only have catastrophic effects but hasten the collapse of civilisation. By accentuating the gulf that already exists in society between those who have (the Elites) and those who do not (the Masses) any disruption to the status quo has the potential to accelerate the rate of decline and that in fact the collapse of society would precipitate any collapse in the natural world. And while civilisation,

... appears to be on a sustainable path for quite a long time, but even using an optimal depletion rate and starting with a very small number of Elites, the Elites eventually consume too much, resulting in a famine among Commoners that eventually causes the collapse of society. It is important to note that this Type-L collapse is due to an inequality-induced famine that causes a loss of workers, rather than a collapse of Nature (NASA in Ahmed, 2013).

There is therefore plenty to be anxious about beyond the virtuality of the network in both the psychology and the structure of the social enterprise. I will show how there is undoubtedly a transferable sense of this anxiety in the networked cultural markers that form the bulk of this
examination: a fear of the sky, a mistrust of the machine and most pertinently a fear from within of human nature itself.

The information network (the archive, the torrent stream, the social network, the virtual marketplace) plays a central role in this analysis as it has become the point of entry as well as the distillation device for these cultural markers. The information network is the keeper of both the visible record and its mediated reflection – the virtual history of the unseen emerges from its mesh of fibres. This is the venue where one can find the rocket ship that crashes into a comet, the shooting star of global celebrity, the path to pandemic of the N5N1 virus, the nefarious sleuthing of government agencies and the glittering lights of a once vibrant Modernism (see Figures 9-11). And if we step back and look at the historical scope of this exegetical study (a period that stretches roughly from 1890s to 2010s) through the prism of the network archive then we can quickly discern the velocity of unprecedented social and technological change. And it is towards the end of this period when the emergence of digital network protocols becomes not only a key historical event in and of itself but the very axis upon which the past tilts awkwardly into the future.

While other studies have comprehensively examined the emergence of the networked society elsewhere⁶, it is important to emphasise that as a research tool networked media plays an important role in providing a vantage point from which to view the parallel emergence of a dark pervasive aesthetic – Sterling’s dark euphoric moment. Networks are defined by the traffic they facilitate and the

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⁶ Some of the notions alluded to here such as speed, virtuality and networking can be found in Manuel Castell’s *The Rise of the Network Society* (Castells, 1996) and Paul Virilio’s *Speed and Politics* (Virilio, 1977). Perhaps even more instructive in a historical context is Stuart Brand’s lucid account of the early years of the MIT’s Media Laboratory in *Media Lab: Inventing the future at MIT* (Brand, 1987) and for an update on contemporary network politics see Geert Lovink’s text, *Uncanny Networks* (Lovink, 2002)
connections they make between one digital object and another, for practical purposes we understand this to be the World Wide Web. It is this platform which makes visible these networked relationships and therefore makes accessible – in many cases for the first time – the majority of the artefacts which constitute this study. And even though in relative historic terms it is a medium in its infancy it is in a transitional moment and much of what is available to access and view is somehow marked by this association. Think here of the viral meme, the YouTube parody, the video supercut, the compressed audio file, the torrent stream and the manipulated photograph – all digital objects which are defined by as much as what they are as what they do.

Just as electrification in the early decades of the 20th Century inspired the Futurist’s manifestos and directed the pioneering gaze of the camera lens to its luminous orbs, the web is an equally seductive, immersive and evocative force. Technically the web is the visual representation of the system that operates beneath the surface, but for all intended purposes it has become a dynamic archive for societal and cultural image making on a global scale. The site of action in which this operates at its most potent is the networked city, or as I shall term here, the Cyber City. This is the site where broadcast mediums forge relationships between the media they carry and thereby maximise the points of entry for their target audiences. The Cyber City is the site through which all information passes – or has the potential to facilitate access to that information – resourced with culturally diverse, mostly western netizens for whom reliable web access is near ubiquitous and up to date devices and subscriptions are affordable and many. The Cyber City is the physical grid upon which the web of content sits and the web itself is the physical space’s most complex and most dexterous simulacra. As Mark C. Taylor observes:

This web is neither subjective nor objective and yet is the matrix in which all subjects and objects are formed, deformed and reformed. In the postmodern culture of simulacra, we are gradually coming to realise that complex communication webs and information networks, which function holistically but not totalistically, are the milieu in which everything arises and passes away. These webs and networks are characterised by a distinctive logic that distinguishes them from classical structures and dialectical systems. Though always eluding classificatory schemes constructed to capture them, webs and networks nevertheless display certain rules that guide their operation. The articulation of these rules defines the contours of non-totalising structures that function as a whole (Taylor, 1997).

The contemporary politics of these networks – specifically Big Data, personal privacy and corporate surveillance - is also beyond the scope of this study, but it most certainly has relevance and I would point the reader to Jaron Lanier’s text, Who Owns the Future? (Lanier, 2013) as perhaps the most up to date and progressive critique of this space. For an account of the broader sociological issues surrounding technology and global networks the edited collection Beyond Globalization: Making New Worlds in Media Art and Social Practices (Aneesh, Hall, & Patrice, 2012) provides a wide range of perspectives.
Within this data space that nodes of information, production and distribution coalesce in geographical space as much as they do in a virtual network. Manuel Castells in his 1996 text, *The Rise of the Information Society*, states that the “new global economy and the emerging informational society have indeed created a new spatial form, which develops in a variety of social and geographical contexts: megacities” (Castells, 1996). Societal networks particularly, become enablers for cultural nodes in the Cyber City and as communication technologies become more personable and are increasingly embedded in a user’s space so too does the individual facilitate node-like functions; as Jaron Lanier observes, “digital information is just people in disguise” (Lanier, 2013, p. 19). Castells describes the site of these device based exchanges across a network as “the space of flows” – flows which not only operate within a networked system of protocols but thrive through their immediacy and interrelationships with other facilitators. Castells “imagines a global electronic network superimposed upon the world, a network along which digital information consisting of texts, images, and voice flows instantaneously. Interactions are often simultaneous rather than sequential. This network supersedes the railways, highways, and communication linkages of the pre-information age” (T. P. Hughes, 2004). In this context it is important to emphasise the transitions that have taken place – linearity has become simultaneous and distributed (rhizomatic if you will), while physical analogue systems of communication and distribution have developed into digitised modes of exchange. One of the primary commodities of these flows has become content, vast amounts of data and bandwidth dedicated to the act of – and our interrelationship with – content. Contemporising Castells, Pier Cesare Rivoltella in *Digital Literacy: Tools and Methodologies for Information Society*, writes:

It (information society) cannot be identified with the introduction of information and communication technologies (ICT); better it could be blended with the systematic reorganization that these technologies promote on a social level. Rather than talking about information society, the Spanish sociologist prefers to refer to the concept of informational society. In the first case, information is the content of society, while in the second one it defines the nature of society itself. Informational society is a society ‘made out of information’ (Rivoltella, 2008).

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8 This runs parallel to the emergence of consumer culture and the movement from public spaces of discourse in the city / town and hamlet to the online public commons which has evolved from the bulletin boards of the 1990s to sophisticated social media platforms and so called “dark net” user groups. But as the physical public space turned into a consumer corridor built around the consumption and movement of goods so has the internet succumbed to similar pressures, including the concentration of media ownership and the acquisition by corporations of smaller competing or complimentary firms and technologies - News Ltd (MySpace), Facebook (Instagram), Google (YouTube), Apple (Siri) and Microsoft (Skype). This also has massive implications for individual privacy and the management and security – and the potential profiting from – personal data.
And within this society of information, aka the Cyber City, the primary commodity of our examination in the context of this discussion is image orientated informational exchange via cultural production and indexing in a multitude of forms – whether that be in the vogue of contemporary media arts practice, corporate and independent media production, the exchange of social media, the feverish distribution of a viral meme or the archiving of a historical digital artefact. These exchanges represent essentially the same thing: cultural markers as digital objects.

Frank Tomasulo writing on the historical event as a mediated text in his essay on the contradictory readings of the 1991 video of the beating of Rodney King, echoes Hayden White’s notion of “emplotment” in terms of the ubiquity of the media artefact:

Increasingly, the postmodern world has been called upon to rely on cinematic and electronic evidence for its depiction and understanding of historical events. In short, our concepts of historical referentiality (what happened), epistemology (how we know it happened), and historical memory (how we interpret it and what it means to us) are now determined primarily by media imagery (Tomasulo, 1996, p. 70).

Tomasulo also cites White when he cautions the researcher when dealing with the mediated text: “The analysis of visual images requires a manner of ‘reading’ quite different from that developed for the study of written documents” (White, 1988, p. 1193). A visual text can be loaded, from the manner in which it is framed, the method of its acquisition and construction and the context in which it is presented. Being objective is a difficult task, as Maurice Merleau-Ponty writes in his often quoted posthumous text, The Visible and Invisible: “If we ask ourselves what is this we, what seeing is, and what things or world is, we enter into a labyrinth of difficulties and contradictions” (Merleau-Ponty, 1968, p. 3). For this reason Sterling’s key terms, dark euphoria and gothic high-tech, act as both a guide and an internal logic when plotting the narrative of technoculture in this project.

In addition, the meaning thereby created from this visualisation of knowledge making – or the visual construction of a creative work via visual narrative technique – becomes a critical point of entry into the object and therefore a wider cultural condition. Meaning can be inferred from the time of its construction, its ongoing history as cultural artefact and most critically the context in which an object might be archived, displayed or redistributed. The society of information in the context of network systems and functions amplifies neo-gothic tendencies not only within the technological apparatus but in the cultural narratives sustained and distributed by the network – itself a giant endless text. This permits then, in the context of the 20th century’s techno-futurist narrative, an analysis of various seemingly disparate yet intersecting critiques of a century’s worth of
mediated history that foreshadows the dark euphoric moment and the broader social implications. Any analysis of a new or emergent aesthetic of media art must involve a critical interpretation of both the visible present and the hidden future loop as mapped across a variety of cultural forms. The networked space allows this to happen. We must somehow overcome Baudrillard’s “hysteresis of the millennium” which suggests that we are frozen in crisis, unable to see “beyond” the end – through the here and now – into a possible future (Baudrillard, 1997). Conversely, it is also important that we can determine the origins of that crisis. This analysis therefore becomes an urgent re-appraisal of both an object’s place in history but also its place in the realm of visual communication studies. The object and its signification becomes a layered narrative, unravelling meaning in both directions and demanding we re-orientate our use of machine visualisation to look back at that which looks at us. In *Art As Far As the Eye Can See* Paul Virilio observes the transference of the gaze from the stars to ourselves from our wonder of the mysteries of the heavens to an anxiety of our place in the universe: “The aeroscopy of our view of the world has tipped the gaze of each and every one of us inwards towards the centre of the Earth, while we wait for the unending round of spy satellites in turn to exercise the navel gazing we are now so familiar with” (Virilio, 2007, p. 46). This reductionism is most apparent when our necks are bent over the screens of our mobile device, like some seductive black mirror, drawing us into a state of “megalomania” and of static introversion that “provokes the ‘relief’ of the occurrence of the world” (Virilio, 2007, p. 46). Here the digital object – the screen of the telecommunication device – provides the luminous distraction from the real and reinforces notions of a false futurist ideal. This of course chimes perfectly with Zlaved Žižek’s description of the new millennia as an “endless future” and his thesis on 9/11, *The Desert of the Real* (Žižek, 2002, p. 19). But for Virilio the present-future space is not only without end, but also without a beginning as well. It cannot be navigated and therefore cannot be understood, “it is no longer the growth of the desert which awaits us, but its impassability, its turning into a closed circuit” (Virilio, 2007, p. 29).

The archive, the network, and the broader digital narratives of contemporary culture become the conductive tracks, capacitors and resistors embedded into the substrate of the cultural circuit board. They not only form the reference base for such observations but also largely facilitate the convergent flow of the ideas they subsequently generate – as tools for research but also as

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9 This would certainly hold true for Slavoj Žižek’s critique of the future-present stasis in which the endlessness and non-epochal nature of the everyday banality of the new millennia keeps the real future – the promised technological deliverance – frustratingly at arm’s length. However as we will endeavour to unravel, there are indeed active agents amidst the content producers in contemporary arts for which the unseen is truly exposed and the future belted into sharp relief.
generators for anxiety at their sites of consumption. These are fragile, tentative and often temporary spaces. These are spaces which are self-referential, self-fulfilling technological symbols of a deeper unseen narrative – Sterling’s gothic high-tech temperament in action.

And so, as observers and researchers of digital media in the new millennia, the notion of Baudelaire’s flâneur – as cited by Walter Benjamin – is relevant to developing a picture of these narrative juxtapositions, data signifiers and cultural linkages and thus to defining the aesthetic tone of the digital as we move through the networked space (Benjamin, 1968, p. 167). The interaction, consumption and repatriation of cultural data via the user-as-node rationale when navigating the surface flows of the Cyber City must become the “virtual affair”. The visual interplay and narrative juxtaposition of commercial interventions and cultural response (whether by consumption, remix or comment) shall be his or her engagement.

This user-as-node - the iUser - is the archetypal resident – netizen if you will – of the Cyber City. The iUser is the Cyber City’s primary agent/provocateur/producer/consumer/passenger. This contemporary net-surfing flâneur rides the information – detects and navigates patterns to the same degree that the information is re-articulated in various forms across, around and through each block of the data flux. Here, information and relational signification is internalised, omnipresent while hidden, traumatic while transformative and as real as it is seemingly unreal. While this discussion may be an attempt to explain the cultural precedents of the contemporary media space and its associated cultural markers at the turn of the millennia it must also attempt to divulge the gothic anxiety of the iUser’s experience – the unseen and the uncertain, the horrific and the sublime. The iUser is reader of the text, the user of the device, author of the code and producer of the content. The investigation is occurring within and without as resources are mined from the web, the sidewalk, the billboard, the device, the screen and the page.

///// I have attempted in this chapter to map some of the theoretical territory of this study by citing some of the key theorists who will be used throughout the cultural narrative exposition of this text. By signalling Bruce Sterling’s terms dark euphoria and gothic high-tech as the key concepts that underpin this research project I have given some context to how the narrative will be unpacked. I have placed the site of this study in the network of information flows as defined by Manuel Castells and further refined by Paul Virilio as the “image loop”. Predominately this is a visual study of cultural production. The media artefacts analysed will be mostly digital and their place in history correlate with key technological events which took place from the early years of the 20th Century to the
present. In the next chapter I examine more closely how content running on corporate, government and broadcast networks constitute a site of media consumption and more importantly the signification of meaning. And while I have already introduced the concept of the Cyber City as a metaphorical space that is coded by data and typical of a networked realm, I will use the example of the barcode and the Earthrise image as signifiers for the virtualisation of the lived experience and as a metaphor for the reductive power of digital image making. The Cyber City could then be, quite possibly, representative of the western capitalist network operating within a vast archive of digital objects. This archive constitutes the parameters of this analysis. I will also more fully explore concept of the iUser as the archetypal content consumer and the primary agent for this research endeavour. Through the work of Evan Roth, McLean Fahnestock and myself I will demonstrate how the collating and remixing of network content is a typical response to the accumulation of media content in this space.