FEAR OF THE FEELIES

The Internet, The Story and The Mind in Dystopia

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Introduction

Aldous Huxley's novel, *Brave New World*, published in 1931, presents one of the most renowned visions of dystopia in contemporary literature. Huxley's impression of our future was born of his time – the electrification of industry throughout the beginning of the 20th century ushered in mass production, reflected in his hypothetical *World State* with its cries of 'By Ford!'[1] Simultaneously, humans were becoming subject to the mechanised quantification of the production line. The eugenics movement (of which Huxley's brother, Julian, was a key member), psychological and social conditioning, Freudianism – which Huxley also references – and the beginnings of marketing and PR were finding ways to group human beings and to define them as discrete data sets to process them through the mechanisations of a new consumer society.[2] Most of all, Huxley saw, particularly in America, a society of individuals who were ambivalent of their own compliance at the hands of the mass media in a capitalist machine[3], fully believing the words of advertisers and talkie stars telling them they were living in utopia.

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1   Aldous Huxley, *Brave New World* (London, Vintage Classics, 2007)
2   *The Century of The Self*, dir: Adam Curtis (2002)
3   Gregory Claeys, *Searching For Utopia; The History of An Idea* (London, Thames and Hudson, 2011), 178

I use the term 'talkie' stars rather than 'movie' stars intentionally. One of the most revealing technologies in Huxley's vision, and perhaps the one easiest to analogise with is his own extrapolation of the future of the 'talkie' - the *feelie*.

Fig.1 Linda takes John, the savage outsider of the Brave New World, to the 'feelies' for the first time.

The *feelie* is a protraction of Huxley's anxiety around the 'talkie', then a relatively new technology that allowed synchronised sound to be played with film, eventually leading to cinema as we know it today. The *feelie* is designed to be a totally immersive experience; it combines sounds, visuals and physical vibrations to provide a high-stimulus experience described as 'far more real than reality.'[4] Janet Murray, a prominent theorist on potential fiction writes of the *feelie*:

> The horror of the *feely* theatre lies in knowing that your intense responses have been calculated and engineered, in knowing that a technician has set the male voice at "less than 32 vibrations per second" to achieve an automatic erotic effect and has reduced the lips of all the individual audience members to just so many "facial erogenous zones" to be simulated by galvanic means like so many light bulbs to be flipped on.[5]

Crucially, the *feelie* is not a narrative. The particular *feelie* feature described in *Brave New World* 'relies on arresting helicopter views, lots of sex, and characters who are bursting into song.' Rather than story, it calculatedly stimulates the nervous system, ensuring neurologically perfect entertainment. The antithesis of the *feelie*, and through reverse analogy, the antithesis of the *World State*, is fictional narrative. Ultimately, it is through exposure to literature via the outsider, John the Savage, that the lead character-citizens of the novel begin to question and become critical of their society.

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4   Huxley, *Brave New World,* 146
5   Janet Murray, *Hamlet On The Holodeck; The Future of Narrative in Cyberspace* (Cambridge, Massachusetts, MIT Press, 1997), 19

No longer living in placid satisfaction, but in fear, they develop as individuals and look to alternative lifestyles.

This motif – of fiction and narrative 'freeing' an enslaved citizenry from an oppressive state – is repeated throughout the entire history of dystopic fiction. In Ray Bradbury's *Fahrenheit 451* (1953), the book-burner, Montag, becomes appalled by the corruption of society after reading the novels he is charged with destroying. Again, this is a world of technological distraction, where televisors – huge wall screens – are 'dedicated to incoherent but arresting entertainment'[6] in every home.[7] Gary Shteyngart's *Super Sad True Love Story* (2011) depicts 'a very near future, [in which] a functionally illiterate America is about to collapse,'[8] with an ignorant citizenry too engrossed in arbitrarily ranking each other on incomprehensible social networks and voraciously consuming worthless product to notice the disaster around them, while our narrator, an avid reader writes his personal critiques on the failings of the nation.

This dissertation takes these model, fiction-less dystopias as a backdrop for the following hypotheses and enquiries:

- Firstly, the Internet, through the nature of its form and the vast array of media it contains has become a real-world embodiment of the *feelies*; numbing and sedating the mind.
- Secondly, establishing the importance of fictional narrative's psychological role – both in dystopia and reality – to humanity and how the Internet restricts our ability to access narrative's psychological potential.
- Thirdly, whether the inevitably digitised narrative fictions of the future will follow feelie-esque behavioural paradigms or take on as yet young or unknown forms and why.
- Fourthly, how and why we too are reducing ourselves to submit to the Internet's fragmentary nature.
- Ultimately what these changes mean for the future of us and our relationships with narrative, the Internet and each other in light of how we understand them now.

A Soliloquy

Huxley's dystopic vision is now exactly 80 years old and has been consistently praised since its conception as 'prophetic' and somehow meaningful, usually on cynical terms.

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6   Murray, *Hamlet On The Holodeck,* 20
7   Ray Bradbury, *Fahrenheit 451* (London, Harper Collins, 1993)
8   Gary Shteyngart, *Super Sad True Love Story* (London, Granta, 2011), Blurb

In light of his outspoken scepticism of H. G. Wells' utopias, this was probably how he meant to write it – not so much as a potential future, but a satire of his own time. As such, it would be wantonly apocryphal for me to claim that his vision is any way 'coming true.' This dissertation was born of a realisation that Huxley's dystopia presents a strong allegorical framework off which to hang the ideas I had begun to form. As such, I use his nightmarish future as an axle around which the salient points of this dissertation rotate, held together by some of the common themes inherent in his masterwork and other, subsequent dystopic visions.

The Technology That Binds

More Real than Real - Their Feelies, Our Internet

If we were to thrust the immersive and gratifying *feelies* of *Brave New World* into the modern day, then it would transmogrify through movies, television, home video and 500 channel, 24 hour cable TV into something not too dissimilar to videos of kittens on *YouTube*. Videos of kittens, much like the *feelies* 'don't [inherently] mean anything.' but 'mean a lot of agreeable sensations for the audience.'[1] In a more general sense, the *feelie*, or the idea of the *feelie* as an intense, arresting medium, becomes the Internet. With the understanding that almost all current technology is in some way now a part of the global machine, the definition of the Internet I refer to here is the generalised media platform and content that we are all familiar with.

It should be noted that the *feelies* and the Internet fundamentally differ from each other in the motivating forces behind their inception. The feelie is a form of oppression, designed to keep the already conditioned populace of *Brave New World* thoughtless and stimulated on a purely chemical level, while the Internet, so far as we know, has no such consciously sinister force behind it (although Huxley might have

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1   Huxley, *Brave New World*, 194

foresightedly assumed that it did). So, the analogy here is drawn on the behavioural effects of the two; the feelie being intentionally designed to dazzle and paralyse, while the Internet could be said to perform the same phenomena simply through its nature and our demands on it.

Nicholas Carr is perhaps the most vocal critic of the Internet's perceived imposition on our neurological makeup. He believes that the structure of the Internet, and the way we interact with it, is enacting physical changes to our brain; making us cognitively fickle, less able to be critical and reflective. Carr cites three contributing factors which are outlined in this chapter:

- The phenomenon of neuroplasticity – the theory that the brain can alter its physical make-up with repeated practice.
- That the Internet provides exactly the type of repetitive stimulation to intensify this process as well as engineer a primal response of distraction in us.
- That the open and responsive Internet provides us with a mechanism of psychological rewards that ensures our repeated use.

1. The Changing Brain - Neuroplasticity

Neuroplasticity was first touched-upon when Sigmund Freud 'emphasized that when two neurons fire simultaneously, this firing facilitates their ongoing association.'[2] It was the neuroscientist Michael Merzenich, experimenting throughout the last three decades, who was able to conclusively prove that '[brain] plasticity exists from cradle to grave'[3] and now, as a result, 'most mainstream neuroscientists accept the plasticity of the brain.' Neuroplasticity does not affect what we learn or how knowledgeable we are, but until Merzenich's work, it was widely held that there were limits on our abilities to learn as defined by the unchanging biological structure of the brain; that the brain was fixed, like a computer, in what it was capable of, from adulthood onwards. Merzenich proved that 'unlike a computer, the brain is constantly adapting itself.'

2. Web Behaviour – The Orientating Response

The Internet is unique among media in its immersive and demanding brevity, intensity and speed. The written word absorbs our visual centres; music and radio engross the audio; and television – Ray Bradbury's particular technological nemesis – both. The Internet, however, compels and rewards the use of more senses than ever

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2   Norman Doidge, *The Brain That Changes Itself; Stories of Personal Triumph from The Frontiers of Brain Science* (London, Penguin, 2008). 223
3   Doidge, *The Brain That Changes Itself,* 46-48

before, not only in its output, but in our input. The Internet demands full 'flow' – a state in which our entire executive function is fully engaged. Not only must we read, watch and listen, but we must act out our own script with the Internet, responding 'to cues delivered through a screen or a speaker.'[4] Using our hands 'we tap the keys on our PC keyboard…[or] drag a mouse and click its left and right buttons and spin its scroll wheel.' Our eyes and visual processing switch rapidly between videos, images, text or abstracted symbols and icons, while our ears and audio processing centres absorb background music, narration or online conversation that we might simultaneously be utilising our vocal abilities for. All the while we are constantly standing by for the uniquely identifiable beeps and clicks that tell us to switch to a different part of the screen where a message from one of a handful of running social network sites, email servers, news feeds, download clients or chat programs has popped up.

If Internet user habits have the aura of a brutal digital outback, where we play a delicate herbivorous mammal; nervous and skittish, our senses and attention jumping from place to place every fraction of a second for potential threats then it's because the psychological state we occupy, when in full 'flow' with the Internet, is the very same primal 'orientating response' observed in humans and animals by famed Russian psychologist, Ivan Pavlov, in 1863. In the 1950's another Russian psychologist, Eugene Sokolov stated that we are naturally pre-disposed to 'instinctively interrupt whatever we are doing, turn, pay attention'[5] and potentially respond to any sudden changes in our environment. When using the Internet, the immersion is so intense that the environment becomes the confines of the screen and keyboard. The orientating response was used to explain why the 'cuts, edits, pans, zooms and sudden noises' of television illicit such a powerful sedating response among humans and animal alike, and subsequently becomes so engrossing to its, almost literally, captive audience. The Internet multiplies this subconscious effect with its vast array of stimuli but it primarily distracts us through a more conscious system of psychological gratification.

3. Sharing and Showing – Psychological Feedback

The Internet hooks us with a 'high-speed system for delivering responses and rewards – positive reinforcements – in psychological terms.'[6] Sherry Turkle, in her studies of technology's effects on human behaviour writes that these reinforcements are the result of 'neurochemical response[s] to every ping and ring tone…when we receive

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4   Nicholas Carr, *The Shallows; How The Internet is Changing The Way We Think, Read and Remember,* (London, Atlantic Books, 2010), 116
5   Doidge, *The Brain That Changes Itself,* 309-310
6   Carr, *The Shallows,* 117

a text or e-mail, our nervous system responds by giving us a shot of dopamine…
we are stimulated by connectivity itself.'[7] Kevin Kelly, the popular technologist and
WIRED founder agrees that 'online masses have an incredible willingness to share.'[8]
We can visit Gary Shteyngart's fictional dystopia of *Super Sad True Love Story* to see
this willingness to share: Lenny Abramov, the non-tech-savvy main character and so-
called 'last reader on earth' has, for the first time, signed up to the omnipresent social
networking site *Form A Community* in a bar:

> Annie was the girl I had FACed first. The one who had been allegedly abused by
> her dad and ranked my MALE HOTNESS a meager 120 out of 800…. I went
> to get some beers, passing girls on the way, but they were too busy looking at
> rankings.[9]

The fictional social super-network, *FAC*, lays open every aspect of its participants'
lives; their deepest, and what we might consider most private, sexual and psychological
secrets and desires, leaving them open to be ranked and compared in full view of the
entire world and it's this perverted system of popular arbitration that rewards use.

Contrarily, Kevin Kelly believes our desire to share ourselves in huge online
communities, even at the expense of what might conventionally be considered humility,
is driven by our desire 'for the next higher level of community: cooperation.'[10] Like
a lot of technologists, Kelly has a tendancy to coldly refer to humanity as a single
stratum of data in a bigger machine, neglecting the motivations of the individual
human being. He fails to realise that what usually drives someone to 'agonize over
what photographs to post'[11] to *Facebook* or make obnoxious comments about kittens
on *YouTube* is rarely an over-inflated altruistic utopian ideal so much as a self-satisfying
drive for approval, evidenced by everything from the ubiquitous 'Like' buttons
of *Facebook* fame to 'ranking' videos by the number of views. This is the seat of
the 'positive reinforcement' the Internet offers and the chances of a response are
increased with one's activity being more unique, personal or contentious and it's these
responses – positive reinforcements – that give us the thrill which can rapidly become
addictive.

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7   Sherry Turkle, *Alone Together; Why We Expect More From Technology and Less From Each Other*, (New York,
    Basic Books, 2011), 227
8   Kevin Kelly, *What Technology Wants,* (New York, Viking, 2010), 314
9   Shteyngart, *Super Sad True Love Story*, 89
10 Kelly, *What Technology Wants*, 315
11 Turkle, *Alone Together*, 274

The Internet and our Brain

Nicholas Carr points out that when we apply the theory of neuroplasticity to our orientating response on the Internet and the psychological kicks it gives us then it becomes clear that the type of activity we conduct is 'practising' our minds into behaving like 'lab rats constantly pressing levers to get tiny pellets of social or intellectual nourishment.'

> The Net's cacophony of stimuli short-circuits both conscious and unconscious thought, preventing our minds from thinking either deeply or creatively. Our brains turn into simple signal-processing units, quickly shepherding information into consciousness and then back out again.[12]

Ultimately, the mind of the Internet, in Carr's view, is one of information gluttony. It encourages in us a state of mind lacking patience for deeper criticism and reflection on our world and ourselves. We voraciously absorb information, stimulated by the orientating response and the psychological kicks without attaining any wholesome meaning from it – the exact state of mind that Huxley fears for us in *Brave New World*. Susan Greenfield, a neuroscientist equally critical of the Internet's effects on our brain puts it eruditely: 'The danger may lie not so much in the technology itself but in the risk that we could mistake the acquisition of facts for the attainment of "understanding."'[13]

Wasn't I Wonderful! - Their Televisors, Our Internet

A concise analogy of our web behaviour can be drawn from Ray Bradbury's *televisors* in *Fahrenheit 451* where 'viewers converse with on-screen characters by reading from scripts in answer to their cues.'[14] The *televisor* and its role within Bradbury's story is an obvious extrapolation of the television, a medium that's 'tacit aim…is to keep us from catching a glimpse of the world in which we actually live'[15] but I believe the *televisor* bears a more remarkable resemblance to the Internet.

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12   Carr, *The Shallows,* 119

13   Susan Greenfield, *The Richard Dimbleby Lecture; Our Future Could be Just Too Much Fun* (1999)

14   Murray, *Hamlet On The Holodeck,* 23

15   Lynn Hersham, *The Fantasy Beyond Control* in *The New Media Reader.* ed. Noah Wardrip-Fruin (Cambridge, Massachusetts, MIT Press, 2003), 645

Linda's World

The protagonist's wife, Linda, inhabits the enclosed hyperreality of her *televisors*, under the empirical illusion that she is interacting with a 'family' (a somewhat blurry definition of character and actor in one) in front of an audience of millions of viewers. In actuality, she responds to weak, transparent and timed cues designed to reward her with a predictable response. It's not hard to draw a parallel between her behaviour with the *televisor* and real world human 'rat and pellet' behaviour with the Internet, a medium that 'only appears to talk back.'

Fig.2 Linda interacts with her televisor family.

In one scene of the 1966 film adaptation Linda squeals giddily after taking her scripted part in a particularly lacklustre pre-programmed narrative: 'You saw it didn't you? I gave all the right answers! Wasn't I wonderful? I could have been an actress, don't you think?'[16] Montag, our hero, can only look at his wife Linda despairingly in response.

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16   *Fahrenheit 451* dir: Francois Truffaut, 1966

It's not arrogant to surmise that Linda's self-delusory grandeur takes a kind of docile ignorance on her part. Her reaction is due to a combination of the 'orientating response' of the *televisor* as well as the positive feedback she receives from her 'interaction.' It is also the fault of a factor discussed later in this dissertation as being related to her disconnectedness from the real world and the proper narrative that affords us reflection and self-criticism.

Her positive feedback comes from the sense of achievement at being so 'successful' at playing her part with the *televisor*, perhaps imagining some digital-ethereal audience roaring her praises at the back of her mind – a *televisor*-powered system of reinforcement. In posturing of her abilities as an actress, she justifies her time with the *televisors* while, as an audience, we are critical, even appalled, at the meaningless futility of her chosen lifestyle. One only has to inspect the egotism of self-important bloggers or the rise of self-styled 'professional' photographers on *Flickr* to see this effect in action. It would seem that anyone with a handful of 'hits' on their creative work views themselves as some sort of holy oracle despite the readily available statistical data showing us just how many web pages we each visit and thus the insignificance of these courtesies to amateurs.

A Way to Let Them Judge You - Our Internet

Our current model of the Internet – social networks and wanton kitten commentary – is unlike the enclosed hyperrealities of the *televisors* or even the *feelies*. It is a wide-open and voyeuristic technology, a younger version of Shteyngart's *Form A Community*: 'It's like a way to judge people and let them judge you.'[17] *FAC* employs a powerful positive feedback system via the feeling of being 'gratified by a certain public exposure.'[18] Shteyngart's is a world in which 'force becomes unnecessary because the state creates its own obedient citizenry [who have turned] their eyes on themselves.' However, *FAC*, the *televisors*, the *feelies* and the Internet are alike in that they all use positive reinforcement to ensure immersion and occasionally, addiction. They all, in some way, cause a sedative effect on the mind through the orientating response and the consequent 'reprogramming' of the mind that goes hand-in-hand with repeated use.

They also posses another remarkable similarity that will be expounded upon later in this dissertation – they quantify their content and user, and bring them into Huxley's feared production line: the clinical programming of the *feelies*; Linda, timed

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17   Shteyngart, *Super Sad True Love Story*, 89
18   Turkle, *Alone Together,* 262-263

to supply her inconsequential lines at given times, along with, as Montag points out, 'everyone else in the world called Linda'[19]; while Lenny struggles to come to terms with numerical values being applied to objectively qualitative criteria such as his appearance and personality.

19   *Fahrenheit 451* dir: Francois Truffaut, 1966

The Fiction That Frees

<u>Burning Books – Narrative as a Threat to Dystopia</u>

Within the dystopic totalitarianisms of Aldous Huxley's *Brave New World* and Ray Bradbury's *Fahrenheit 451*, literature is banned by state mandate and in both instances, with similar motivations. It is repeatedly made clear throughout *Fahrenheit 451* that literature is considered 'anti-social' by Montag's fellow denizens, implicitly because of consistent psychological coercion ensuring they believe so. Mustapha Mond, representing the *World State* of *Brave New World*, assures John the Savage that 'civilization has absolutely no need of [the] nobility or heroism'[1] afforded to it through the reading of literature. Perhaps, in examining the thematic intentions of Bradbury and Huxley, we can read a subtext of self-importance from these two particularly socio-politically aware authors (and in fact authors in general, who have a deadly habit of being exiled, executed or imprisoned by dictatorships) that they would consider their particular art to be of such unique societal importance.

However, we need only turn to history for justification of their self-imposed grandeur. From the Bonfires of the Vanities of late 15th century Florence, ensuring

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1   Huxley, *Brave New World*, 209

the Church's control over a 'morally corrupt' state, Adolf Hitler's book burnings destroying the bourgeoisie literature of the Weimar Republic, Stalin's brutal censorship and the harsh state-enforced suppression of seemingly harmless texts today, narrative is a threat to absolutist leadership.

> The siren power of narrative is what made Plato distrust the poets as a threat to the Republic. It is what made Cervantes' contemporaries fear the new fad of silent reading. It is what made the advent of movies and television so frightening to the dystopian writers of the twentieth century.[2]

Huxley's *World State* leadership extols its censorship of literature in two ways. Firstly, much like in Shteyngart's future America, it is perceived as outmoded and irrelevant. Secondly, like Linda in her *televisor* hyperreality, the *World State* has systematically erased all traces of the world that preceded and is outside it in order to keep its specially bred citizens cushioned in a sterile environment because: 'Universal happiness keeps the wheels steadily turning; truth and beauty can't.'[3]

In this chapter we meet a model of the human mind that is antithetical to the 'rat and pellet' mind of the *feelies* or the Internet. Once we understand how fiction fuels this mind, we can understand both why dystopia abhors it and then discuss the future of this mind on the web.

Towards a Definition and the Value of Fiction.

Ask a child embarking on their first dalliances with constructed irreality to define fiction and they will respond with something akin to a series of events, retold and failing to correspond with events in reality. This definition, however, allows the *televisors*, *feelies* and, arguably, some digital social interactions, dystopic or real, to be called fiction. Keith Oatley, a psychologist specialising in fiction observes a definition that is supremely pertinent to this dissertation: 'Fiction and poetry are *constructed in the imagination.*'[4] This bears particular relevance when considering the cold calculation behind the images, sounds and vibrations of the *feelies*. Beyond that, fiction relies on two core principles; firstly that it is an abstract of reality and secondly that this abstraction allows it to take on the role of a simulator in the mind of the reader. These criteria, through the same principles of neuroplasticity mentioned earlier, practice in the reading mind the ability to construct their own reflective and critical simulations.

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2   Murray, *Hamlet On The Holodeck,* 98
3   Huxley, *Brave New World*, 201
4   Keith Oatley, *Such Stuff as Dreams; The Psychology of Fiction* (Chichester, West Sussex, Wiley-Blackwell, 2011), 7 [Italics are my own]

1. Fiction Is Abstract

In 1884, the author Henry James published an essay in *Longmans Journal* entitled *The Art of Fiction*. In the essay, he posited that a novel is a 'direct impression of life.'[5] A few weeks later, Robert Louis Stevenson, at that time an obscure children's book author, sent a little-known reply:

> No art is true in this sense: none can "compete with life"... Life is monstrous, infinite, illogical, abrupt and poignant; a work of art, in comparison, is neat, finite, self-contained, rational, flowing and emasculate. Life imposes by brute energy, like inarticulate thunder; art catches the ear, among the far louder noises of experience, like an air artificially made by a discreet musician.[6]

Stevenson, and almost all literary theorists and authors since have considered fiction to be an abstract of reality, not a reflection. Or, to use Keith Oatley's terms, fiction is 'world-simulating,'[7] which 'works because certain relationships among things in the model world correspond to certain relationships among things in the ordinary world.' It is upon these metaphysical dioramas that we are afforded the omnipotence to evaluate elements of a fiction against the world as we understand it. Oatley analogises that:

> …straight lines and circles do not exist in the physical world…but in the practical activities of engineering in which bridges are designed and cars are constructed, they are essential.[8]

2. Fiction Is a Psychological Playground

Much like mathematics, we use fiction as a social, cultural and psychological simulation or, what I prefer to call (partly as a nod to psychologist's penchant for using children as case studies), a playground. In fact, parallels are often drawn by psychologists and literary theorists alike between child's play and narrative, with Oatley asserting that the 'writer draws on the play of childhood.'[9]

Whether conspicuously – through genres such as science fiction – or via the twisting passageways of *Ulysses*' winding narrative, the author-creator of fiction is conscious of his will to express an abstract model of the world he inhabits, to build a

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5   Henry James *The Art of Fiction* in Longmans Magazine 4 (1884) http://people.bu.edu/rcarney/newsevents/hj1.shtml (accessed 18/08/2011)

6   Robert Louis Stevenson, *A Humble Remonstrance,* (1884) http://robert-louis-stevenson.classic-literature.co.uk/memories-and-portraits/ebook-page-67.asp (accessed 18/08/11)

7   Oatley, *Such Stuff as Dreams,* 14

8   Oatley, *Such Stuff as Dreams,* 8

9   Oatley, *Such Stuff as Dreams,* 25

'psychological playground' for his readers. We now have to investigate what properties of these vignettes of existence give our heroes the power and inclination to dissent, what it is that Nicholas Carr and Gary Shteyngart believe we are unresistingly giving up for quick, stimulating thrills at the ends of the tendrils of the Internet.

What the State Fears – the Reading Mind

The very existence and sustentation of the psychological playground relies on the fiction reader being able to discern and acknowledge the difference between fiction and reality; 'art is dependent on establishing distance.'[10] Taking Oatley's idea of fiction as a model, then for an accurate comparison to be made in the mind of one overlaying an alternative world model onto his own, there must be a conscious separation between the two.

In the case of Huxley's John the Savage, he is appalled by the *World State* because his access to literature had allowed him to construct an empirical understanding of the world against that of fictions. The Alphas from the *World State*, due to their under-exposure to fiction are 'lodged in the literal and immediate'[11] – unable to comprehend alternatives until exposed to the savage's endless Shakespeare recitals. As Janet Murray outlines: 'we rely on works of fiction, in any medium, to help us to understand the world and what it means to be human.'[12] Steven Johnson, though generally arguing in favour of fast culture and technological immersion agrees:

> No cultural form in history has rivalled the novel's capacity to re-create the mental landscape of another consciousness, to project you into the first-person experience of other human beings. Movies and theatre can make you feel as if you're part of the action, but the novel gives you an inner vista that is unparalleled: you are granted access not just to the events of another human's life, but to the precise way those events settle on his or her consciousness.[13]

In the pre-Internet dystopias of *Fahrenheit 451* and *Brave New World* it is this critical awareness the authors recognise is accessible through fiction and that their dictatorships are resultantly threatened by. Not only is this threat applicable in our theoretical models of a dystopia, but as previously highlighted, throughout history itself. Fiction nourishes our individuality by allowing us to intellectually assimilate the

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10   Murray, *Hamlet On The Holodeck,* 101
11   Oatley, *Such Stuff as Dreams,* 30
12   Murray, *Hamlet On The Holodeck,* 26
13   Steven Johnson, *Everything Bad is Good For You; Why Popular Culture Is Making Us Smarter,* (London, Penguin, 2005), 187

unfiltered experiences of others in a way that the brevity of the *feelies*, the *televisors* and the Internet cannot. Within a conformist society, this individuality is a threat.

The Internet and the Reading Mind

What does the new Internet mind mean for the established values that textual narrative presents? The not-too-distant future consumer-driven America of Gary Shteyngart's *Super Sad True Love Story* has voluntarily rejected literature as a cultural artefact. Literature fails to fulfil the desire of these super-consumers for instantaneous positive psychological feedback from their media and the stimulus now only afforded by their incomprehensible but ubiquitous social networks. The Internet has 'rewired' the population's brains through the principles of neuroplasticity to be impatient and demanding of their media, without the cognitive power for deeper, meaningful immersion and reflectivity.

In our world, the popular appeal of the printed book is in decline. Conversely it has been much reported that sales of e-books have outstripped sales of new hardback fiction for the first time ever this year.[14] However, the uptake in e-books does not directly correlate to the dip in printed literature: Codex-centric reading has begun to migrate online, but with it the growing scope and diversity of sources available, from blogs, news sites, feeds, social networks, rapid correspondence and other miscellaneous content aggregators has, much like *Super Sad True Love Story*, led most, if not all of the modern web user's cognitive executive function away from narrative.

Nicholas Carr, perhaps motivated by nostalgia for print, sees Shteyngart's as a highly plausible future; we will, he says, through consistent use of the Internet's rapid, intensive form of media, quite simply condition ourselves out of the ability to read. What happens when the documented effects of Internet use subsume the invaluable role of our fictions? How plausible is Shteyngart's future?

A Loss of Understanding

Steven Johnson emphasises that for narrative to perform its function 'you have to commit to the book, spend long periods of time devoted to it.'[15] Knowledge and awareness take time to build; experience must be compared with memory and conclusions drawn from the results, and it's exposure to other human's consciousness,

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14   Alison Flood. *Ebook Sales Pass Another Milestone*, Guardian.co.uk News (2011) http://www.guardian. co.uk/books/2011/apr/15/ebook-sales-milestone?INTCMP=SRCH (accessed 10/05/11)

15   Johnson, *Everything Bad is Good For You,* 187

fictions and what-ifs that we use as a model to build this understanding around. As Susan Greenfield points out: 'Understanding occurs when we can appreciate a fact in the light of what we have learned previously…facts alone are futile without the ability to use imagination and translate them into understanding.'[16] The impatient web mind struggles with this kind of cognition.

Carr, in his own critiques of the Internet's effect on fiction cites another quote from Johnson: 'I fear that one of the great joys of book reading – the total immersion in another world, or in the world of the author's ideas – will be compromised. We all may read books…[but only] a little bit here, a little bit there.'[17] With this, the sustained commitment that allows narrative to exercise its value as a simulator would be lost.

Unlike Carr, Greenfield and others, Johnson posits and presents evidence that the Internet is actually expanding our abilities and making us markedly more intelligent, citing IQ scores, game complexity and the abstract reasoning of tech-savvy individuals as a case for the Internet as a boon to understanding. Yet, despite the 'great intellectual nourishment'[18] available from the Internet, even he admits that 'popular culture is not doing a good job at training our minds to follow a sustained textual argument or narrative that doesn't involve genuine interactivity.' The neuroplastic 'training' that is necessary in order to develop the critical mind of the reader requires repeated practice, but the psychological rewards and kicks the Internet offers is making us more inclined to restructure our brains for Internet immersion.

16   Greenfield, *Our Future Could be Just Too Much Fun*

17   Steven Johnson, *How The E-Book Will Change The Way We Read and Write*, Wall Street Journal 20/04/2009 (2009) quoted in Carr, *The Shallows*, 103

18   Johnson, *Everything Bad is Good For You,* 187

Narrative On The Internet

The Reading Machine

I've established the importance of narrative to the human mind and how the Internet, through its myriad distractions and rewards, might 'phase out' our interest and the rewards we gain from literature. It is inevitable that for narrative to survive, it must and will be digitised. We now have to examine what, in light of the Internet's demand for brevity, intensity and speed, this means for it.

Much like Janet Murray, Espen Aarseth is a prominent literary theorist in the realms of digitised text, but unlike Murray he insists that the specifics of the medium of a novel are an 'almost ergonomic concern.'[1] He posits that reading is a machine, constructed of a user/reader and a 'material medium as well as a collection of words.'[2] Alterations to the medium, he asserts, are inconsequential because the creative aspect – the foundation of the work itself – is the words. However, Aarseth, as a literary theorist, overlooks the profound effects that digitising a text has on it, what it becomes because of the process, what it means and how it's read as a narrative.

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1   Espen Aarseth *Cybertext; Perspectives on Ergodic Literature* (Baltimore, John Hopkins University Press, 1997), 17
2   Aarseth *Cybertext*, 21

Databasing Fiction

What the Internet does to narrative, or, put more accurately, what we do to narrative to ensure that it fits in with the behavioural systems that the Internet has trained in us, is to make it database-able. Lev Manovich validly argues that narrative is already a database of events and characters but cemented into a predefined order at its inception: 'The user of a narrative is traversing a database, following links between its records as established by the database's creator.'[3]

Of course, the physical nature of a book as opposed to a browser window means that one can enter the narrative at any arbitrarily remembered point they chose to open it at (it is no coincidence that the anachronistic term 'bookmark' has carried over to the Internet.) In fact, some experimental codices such as Raymond Queneau's *Cent Mille Milliards de Poèmes* or Marc Saporta's precognitive *Composition No.1* which 'consists of loose sheets that the reader shuffles and reads in a random sequence'[4] to arrange a unique narrative are indeed designed to be read this way, almost exactly like a database, with entries able to be accessed at any time in any order.

Fig.3 Raymond Queneau's Cent Mille Milliards de Poèmes is a database of sonnet lines.

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3   Lev Manovich, *The Language of New Media* (Cambridge, Massachusetts, MIT Press, 2001), 227
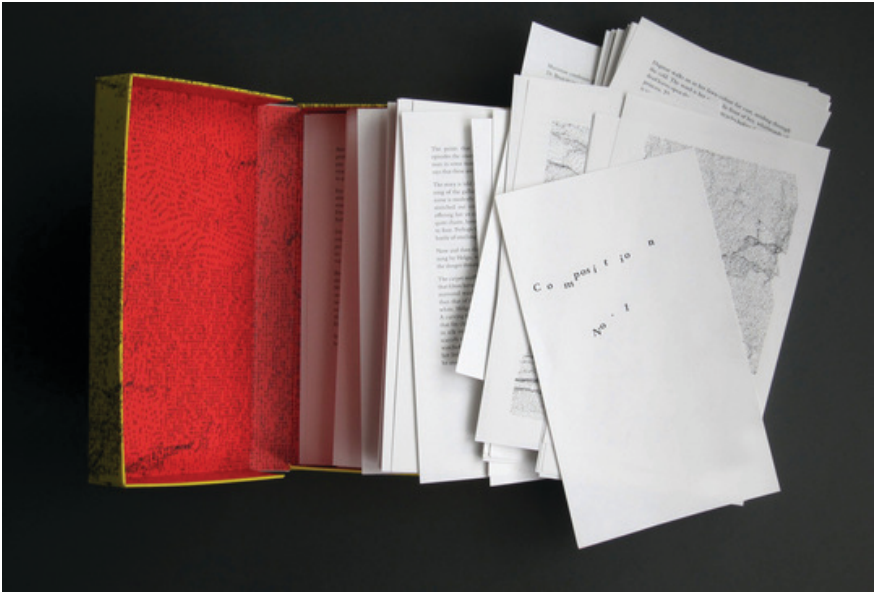4   Aarseth *Cybertext*, 66

Fig.4 Marc Saporta's Composition No.1

Why the digital realm is constructed of databases, from image galleries, to file structure to hyperlinks is a simple reflection of our relationship with the real world. Narrative is a linear abstract of reality; it's only with the privilege of hindsight and a third person's perspective that we can construct one. The arguments of this dissertation for instance, formed themselves in obscure, broken fragments of ideas, and took a conscious degree of reflection and organisation to form into a linear structure. In reality, the 'world appears to be an endless and unstructured collection of image, texts, and other data records, it is only appropriate that we will be moved to model [the computer and the Internet] as a database.'[5]

Fragmenting

In order that content submit to the Internet's formatting demands, it must be fragmented, like all web content:

> …producers are chopping up their products to fit the shorter attention spans of online consumers, as well as raise their profiles on search engines. Snippets of TV shows and movies… excerpts of radio programs….magazine and newspaper

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5   Manovich, *The Language of New Media*, 219

articles circulate in isolation…single pages of books are displayed through Amazon.com and Google Book Search.[6]

In this sense, 'modern media follows the logic of the factory'[7] in reducing completed narratives into components. This fragmentation occurs simultaneously and symbiotically at two levels. At the macro, human level the text itself is fragmented, removing it of the permanence and authenticity a codex grants it, opening it to collage and reconstitution. At the micro, computer level text is quantified, translating it away from the original and generalising it as computer code, further disrupting its permanence.

Searching for Austen – Fragmentation on the Human Level

As a result of the way the Internet steers us to absorb information – in rapid, intense bites – we also upload and structure information in a way that makes it usable on these terms. For example, typing the opening lines to Jane Austen's *Pride and Prejudice*; 'It is a truth universally acknowledged, that a single man in possession of a good fortune, must be in want of a wife.' into *Google* instantly yields a wealth of 'inspirational' quotation pages, some design tutorials using it as placeholder, the *Wikipedia* page for 'Irony', blogs featuring the quote and a community-driven page offering pre-described solutions to standard critical study of the work.

This particular quote is notable for exemplifying Austen's historic use of irony. The individual significance of irony to the reader is that it enables in them the ability to think 'about some possibility and then, at the same time wonder about its opposite.'[8] The line however, only bears this significance in light of the story that prescribes its context. In all of the search results, it is either laid bare for copying and reproduction or is accompanied by only the briefest annotations explaining its significance. The quote on its own, extracted from the rest of the narrative is debased to near meaninglessness, a tag to be used to feign intelligence or copy for a high-school essay.

The native brevity of the web encourages this 'efficiency and result[s] in fragmentation,'[9] a forensic extraction where copies of a quotation are pasted over 314,000 *Google* results. When one invites themselves into the world of *Pride and*

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6   Carr, *The Shallows,* 94

7   Manovich, *The Language of New Media*, 29

8   Oatley, *Such Stuff as Dreams,* 45

9   Victoria Vesna. *Community of People with No Time: Collaboration Shifts* in *First Person; New Media as Story, Performance and Game.* ed. Noah Wardrip-Fruin & Pat Harrigan, (Cambridge, Massachusetts, MIT Press, 2004), 249

Prejudice through *Google*, they do not experience it as the intractable impression of humanity that Austen intended, but as edited, possibly annotated bites. Jaron Lanier, lamenting technologist philosophy writes: 'People are encouraged by the economics of free content, crowd dynamics and lord aggregators to serve up fragments instead of considered whole expressions or arguments.'[10] Walter Benjamin, writing about this effect in lieu of the invention and popularisation of photography, dubbed it the withering of 'aura'[11] and it's not hard to make the comparison here with digitised fiction.
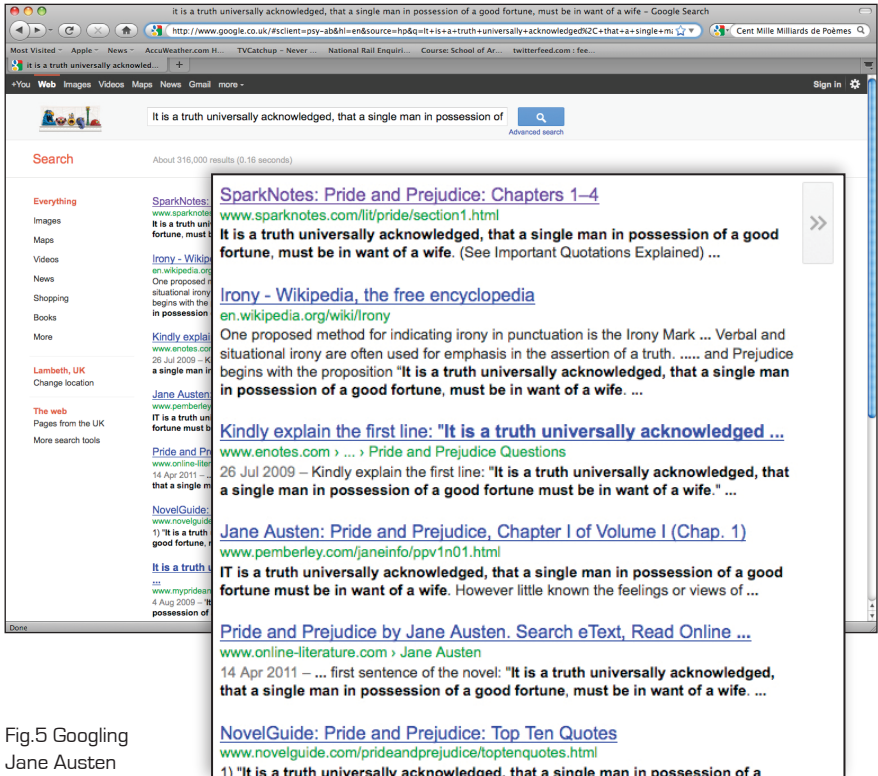

Fig.5 Googling
Jane Austen

The fragmentation of fiction, enacted in order that it concede to our web-driven demands, has several interesting side effects: Firstly the emergence of narrative collage, secondly arising questions of authorship and thirdly the issue of authenticity and permanence in the time and space of the Internet.

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10   Jaron Lanier, *You Are Not A Gadget; A Manifesto* (London, Allen Lane, 2010), 47

11   Walter Benjamin, *Illuminations* (London, Pimlico, 1999), 215

1. Collage – Fan Fictions

The metaphor of fragmented fiction in a database opens to another interpretation when considering a more constructed form of collage – fan fiction. The meteoric rise of which has inextricable ties to web culture as it requires the 'ability to circulate what [a fan fiction author] creates via the Internet'[12] and because its *raison d'être* is to search out positive psychological feedback from a community that appreciates the progenitor of the work. Fan-fiction is necessarily derived from an original, 'authentic' narrative, whether film, game or novel but it accesses and reconstitutes the contexts, characters and events of the original as if in a database.

This is made easier for fan-fiction authors because digitisation allows one to create mash-ups from canon parts of a narrative circulating the Internet. One pertinent example would be the ubiquitous '*The Matrix 4*' trailers, generally consisting of a collage of original footage, directors' cuts and amateur material that shares in the aesthetic. More directly related to text and my earlier example would be *The Jane Austen Fan Fiction Index*,[13] a database of character biographies, places and events of Austen's novels as well as a searchable resource of fan fictions.

Fig.6 Fan-made trailers for 'The Matrix 4' are generally a collage of footage from the canon trilogy and some excited spelling mistakes.

The process of fragmentation runs parallel to the ideology behind the creation of the *feelies*, where the feature – *Three Weeks In A Helirocket* – is a collage, or mash-up of images designed to stimulate but without any wider context and offering no narrative

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12 Henry Jenkins, *Convergence Culture; Where Old and New Media Collide* (New York, New York University Press, 2006), 185

13 *The Jane Austen Fan Fiction Database*, http://www.jaffindex.com/ (accessed 18/08/11)

depth – much like pulling the most revered quotations from classic novels for their stimulating effects and trying to build another piece of art from them.

Fig.7 Three Weeks In A Helicopter (Heli-Rocket in the film version) is a college of stimulating explosions, aeriel acrobatics, singing, sex and fighting with no narrative context.

Unlike the feelies, however, and its particular form of mash-up, fan-fiction is not meaningless stimulation – it expounds on the canon narrative (to greater or lesser success). It is a product of the 'psychological playground' that has given the creator the executive ability to manipulate the databased motifs and schema of the original. What remains to be seen, as an emerging type of content, is whether collage outside of the vision of the original creator debases the 'aura' of the work, withering its cultural value like the quotations stripped of contextual understanding.

2. Authorship – The One Book

Fiction once databased, like all web content, eventually becomes sourceless on the web – melting into the 'one book'[14] that Jaron Lanier so abhors and Kevin Kelly so eagerly anticipates. Once broken into Internet-ready consumable chunks, the innate systems of the web 'obscure the context and authorship of each fragment' of a fiction reducing it to the language of other anonymously authored material and removing the authenticity that gave it its original 'aura' – the sense that it, as a piece of creative work was invincible, purely consumable as a single entity.

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14   Lanier, *You Are Not A Gadget*, 46

3. Permanence – Time and Space on the Internet

The Internet 'revolutionize[s] the objective qualities of space and time'[15] – space becomes immaterial and time at once infinite and instantaneous. 'In going digital, texts lose…physical stability, [the] guarantee of permanence.'[16] In light of this, significant changes are made to the permanence of a text. Some copies may end up on e-book readers, some on computer screens, others on smart-phones or even read aloud through software, each will 'present different versions of the same work'[17] The malleability of digital text removes it from the physical model the author presents, putting a new array of variables in the hands of the reader. The immateriality of a work presents opportunities for editing and updating but again has the possibility of undermining its 'aura' in its loss of physicality.

An author may no longer feel confident that every copy of their book will be identically printed and presented for every reader and this will undoubtedly have subtle changes on the way they connect with and thus create their work.

Fiction, Fragmented.

Once digitised, fiction is no longer irreducible and joins the flotsam of the web, potentially becoming collage-able, authorless and impermanent. It has the potential to debase its authenticity and the 'aura' that gave it power as an art form.

However, blanketing all digitised fiction as debased and meaningless carries its own problem; the 'very real danger…of ignoring or excluding anything that is new, different, innovative or exceptional.'[18] Some instances of more avant-garde forms of digital storytelling as well as video games find themselves in the middle of critical debate between many key technological literary theorists – Espen Aarseth and Janet Murray included – as to their narrative validity. Some of these I will touch upon later.

Scanning for Data – Fragmentation at the Computer Level

Micro level reductionism runs parallel to the human level fragmentation of narrative into the arresting flashes and bangs that define the rapid web. At this level

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15   Vesna. *Community of People with No Time*, 253
16   Gary Hall, *Digitize This Book!; The Politics of New Media or Why We Need Open Access Now* (Minneapolis, University of Minnesota Press, 2008), 66
17   Manovich, *The Language of New Media*, 22
18   Hall, *Digitize This Book!,* 63

we can generalise the fundamental and unspoken paradigms that govern web culture, by being aware that everything on the Internet, including narrative 'can be described using a mathematical function.'

> All new media objects, whether created from scratch on computers or converted from analog [sic.] media sources, are composed of digital code; they are numerical representations.[19]

Words to Numbers

The native language of the computer is mathematics. At the most elementary level, binary language, at higher levels character encoding is used to assign the alphabet numerical values. In terms of processing (a synonym of the popular relationship between time and money), this is the most efficient way of deciphering the abstract symbols that we 'utilize an enormous amount of knowledge in disambiguating and understanding.'[20]

Numerically-fragmenting creative works to make them computer translatable usually presents a problem for computer scientists: Some creative works such as sculpture and painting could be called 'continuous'[21] – that is that they possess infinite resolution and cannot, by themselves, be quantised into smaller units. Some media such as film are continuous and quantified – each still frame is continuous but these frames are each arranged in an order that gives the film as a whole a quantifiable nature. Conversely, narrative, as a product of language comes pre-quantified since 'communication requires discrete units.'[22] Narratives are already a linear textual code that can be divided into sections, sentences, words, morphemes and letters and as such bear the formalised hallmarks of Huxley's dreaded production line in its initial state. The simplicity with which a text can be numerically translated sealed its fate as the first interface of computers as well as providing the underlying framework we still use. Text is the shortest step in translation between the databases of the real, human world and the digital, computer world and as such, is the most manipulable medium in the hands of machines.

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19   Manovich, *The Language of New Media*, 27
20   David Harel, *Computers Ltd.; What They REALLY Can't Do* (Oxford, Oxford University Press, 2003), 212
21   Isaac Victor Kerlov & Judson Rosebush, *Computer Graphics for Designers and Artists* (New York: Van Nostrand Reinhold, 1986), 14 quoted in Manovich, *The Language of New Media*, 28
22   Manovich, *The Language of New Media*, 28

Layers of Translation

However, this process of translation and its activity on the web increases the length of Espen Aarseth's reading machine. It adds several more stages of translation and many more variables into the process of taking the intangible ideas of the writer to the mind of the reader. Formatting, storage corruption, uploading, downloading, editing and saving are all known to have degrading effects on digital media. Of course, text is low resolution – having readily definable discrete units that construct it and so unintended corruption is easy to discern as well as the modern, cloud-like structure of the Internet making data corruption easier to eliminate through the systems that allow sharing.

Fig.8 JPEG images' integrity suffer from repeated saving and sharing, Does this apply to textual narratives also?

The greater threat to the wholesomeness and integrity of a narrative lies in the core modularity of the Internet. When the story is represented as data – a series of numeric processes and patterns – it is clustered with the rest of Internet content, which is also represented in this base language. A story becomes text, becomes

HTML, becomes bits and bytes and joins the intractable data streams of the Internet, again withering the aura that it held in the shape of an incorruptible book. What value does authorship have when a book is represented as a binary string? The author wrote words, intending that they be read as such but by digitising them, they possess the properties of Internet textuality – searchable, linkable, able to be compressed, shuffled and copied directly.

On the Internet, books can be hacked, vandalised *en masse* or loaded with viruses. As another dystopic example, the anime, *Ghost In The Shell,* postulates a future where a virus is spread to the digitally augmented human population of Japan by an essay.[23] In digitising words they become part of the Internet and are obliged to follow its behavioural structure where the author's 'intentionality can be removed from the creative process, at least in part.'

At the computer level, the reduction of a novel to its constituent parts encroaches on a more essential question surrounding the philosophy of reductionism; does the 'aura' of a narrative signify that much like a human being, it is more than the sum of its component elements? Or, with just the right algorithms and 'understanding' of the subtleties of language, could a compelling narrative be computationally constructed by machine?

Machine Writings - Attempting Digital Narratives

There exists a pantheon of 'failed' attempts at artificially constructed narratives – although whether these projects were ever meant to succeed in the first place can justifiably be called into question.

To take a handful of examples, Nick Monfort's *PPG256* is one of many simple poetry generator scripts, none of which are credited with any real success but Monfort's 'generates poems without recourse to any external dictionary'[24] in order that it focus on the fundamentals of poetry construction without the
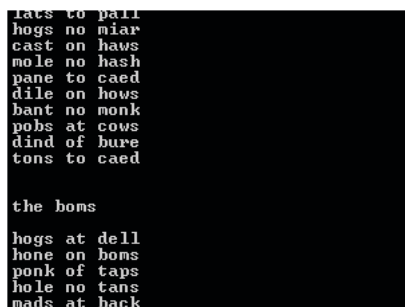
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lats to pall
hogs no miar
cast on haws
mole no hash
pane to caed
dile on hows
bant no monk
pobs at cows
dind of bure
tons to caed

the boms

hogs at dell
hone on boms
ponk of taps
hole no tans
mads at back
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Fig.9 Nick Monfort's PPG256

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23   *Ghost in the Shell: S.A.C. 2nd GIG,* dir: Kenji Kamiyama (2004)

24   *PPG256, Nick Monfort*, http://collection.eliterature.org/2/works/montfort_ppg256.html (accessed 09/09/11)

limitations of language. Unfortunately its output is, if not unreadable, then certainly not compelling.

More recently, David Benque developed an app around the 'work of Vladimir Propp, who reduced the structure of Russian folk-tales to 31 basic functions.'[25] The Infinite Adventure Machines uses an algorithm to construct a 'crude synopsis and
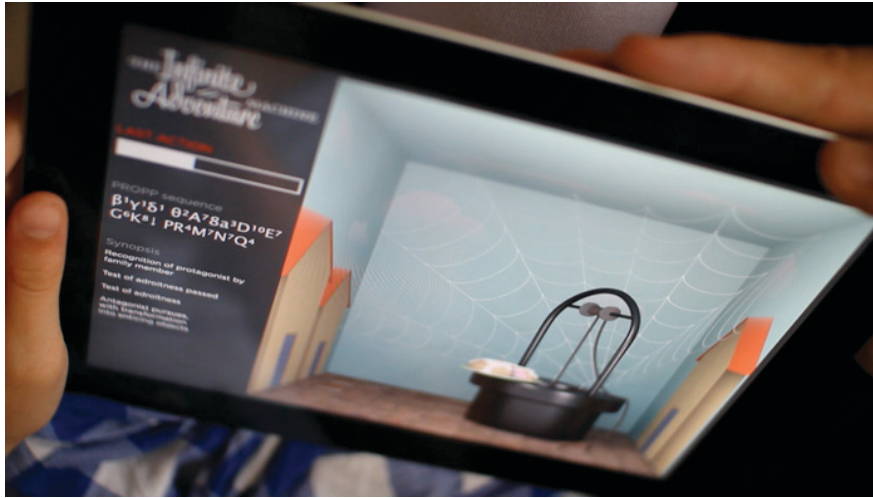

Fig.10 David Benque's The Infinite Adventure Machine

illustrations, users have to improvise, filling the gaps with their imagination and making up for the technology's shortcomings.'

Deadline is an algorithmic program developed to construct the most 'interesting narrative paths'[26] from a sample of human-simulated narratives of a basic murder mystery. The results are, apparently, 'most satisfying.' However, despite algorithms that calculate the most pleasurable narratives, the human operators undertake the final selection, initial programming of the variables and criteria for the story and so, realistically, the machine's control over the narrative is very limited.

The ready reducibility of narrative should make it easy for a cunning machine to constitute a story from it, but ultimately a narrative is not simply a mathematical pattern and without access to the 'psychological playground' and the wider range of human reflection and experience endemic of it, 'it remains to be seen whether we can

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25 David Benque, *The Infinite Adventure Machine*, http://www.davidbenque.com/projects/the-infinite-adventure-machine (accessed 17/09/11)

26 Murray, *Hamlet On The Holodeck,* 62-63

capture the illusion of the incalculability of life with the emotional calculus of the computer.'[27]

Human Writings - Unintentional Digital Narratives

From a human perspective, digitisation presents a potential boon to storytelling: 'The capacity to represent enormous quantities of information in digital form translates into an artist's potential to offer a wealth of detail to represent the world with both scope and particularity.'[28] Also, a decreased interest in long text does not wholly mean a decline of narrative. As previously noted, using the Internet in full 'flow' – that is 'the mental state in which a person is fully immersed'[29] is the same mental condition that we enter when 'deep-reading' and is vital to the proper understanding of a narrative's meaning. If we can achieve this state, as Sherry Turkle shows, when playing video games or networking online, then any narratives in these spaces should be equally as valid as a long novel, 'redefining our concept of narrative.'[30]

Video Games

It's well documented that storytelling, born of imagination 'starts with children's play,'[31] cementing the links between games and narrative. Online and offline video games, after all, concede to the primary definition of fiction as the product of human imagination, though how valid they are in providing the reflectivity of literature is extremely contentious. Sherry Turkle cites how online role-playing games are sometimes 'essential to [the player's] life off the screen…[because the] experiences are helping them to grow.'[32] As technology has advanced, games often have 'their own version of Hollywood's three-act structure, designed to keep us utterly hooked'[33] but how they compare to fiction is an argument far too large and indefinite to enter into here.

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27   Murray, *Hamlet On The Holodeck,* 244
28   Murray, *Hamlet On The Holodeck,* 84
29   Turkle, *Alone Together,* 226
30   Manovich, *The Language of New Media*, 227
31   Oatley, *Such Stuff as Dreams,* 25
32   Turkle, *Alone Together,* 214
33   Keith Stuart, *The Seduction Secrets of Video Game Designers* Guardian.co.uk News (2011) http://www.guardian.co.uk/technology/2011/may/15/video-game-design-psychology?INTCMP=SRCH (accessed 16/05/11)

Social Networking

Less well documented are the fictional considerations of social networking. Avid networkers often spend time trying 'to make the right impression'[34] of themselves to others using the confines of the sites and feel that when interacting with friends they play an 'audience to their performance of cool.' As Jaron Lanier writes: 'The most effective young *Facebook* users… are the ones who create successful online fictions of themselves.'[35]

Again, it's too early to draw accurate parallels between these relatively new but immersive digital social frameworks and narrative fiction but it's clear that there are already common themes of empathetic human inter-relatedness, performance and self-reflection although, the world of social networking once again brings in the question of reducibility - this time of the human.

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34   Turkle, *Alone Together,* 273-274
35   Lanier, *You Are Not A Gadget,* 70-71

Narrative Humanity on the Internet

The Internet's Reductionism

Our narratives are abstracted reflections of ourselves; we fragment and reduce them to fit the constraints of the database Internet. Our reflections are databased and quantified and so are we. It's in this arena that we approach Aldous Huxley's most fundamental fear – that humans would become components in the system of a dystopic state, indiscriminately stratified into machine-like roles, melded with the vernacular of the production line.

> Individual web pages as they first appeared in the early 1990s had the flavour of personhood. *MySpace* preserved some of that flavour, though a process of regularized formatting had begun. *Facebook* went further, organizing people into multiple-choice identities.[1]

Personal reductionism has always been present in information systems,'[2] in fact our interactions with computers rely on it. The language of the computer and its binary nature of absolutes is endemic of its efficiency as a device for calculation and so we

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1   Lanier, *You Are Not A Gadget*, 48
2   Lanier, *You Are Not A Gadget*, 68

have no choice but to format ourselves into the vernacular that the web demands. Jaron Lanier explains that the most severe binary reductionism occurs when we have to format concepts that are entirely antithetical to the absolutes of the computer:

> The binary character at the core of software engineering tends to reappear at higher levels…it is easier to set up a rigid representation of human relationships on digital networks: on a typical social networking site, either you are designated to be in a couple or you are single…[3]
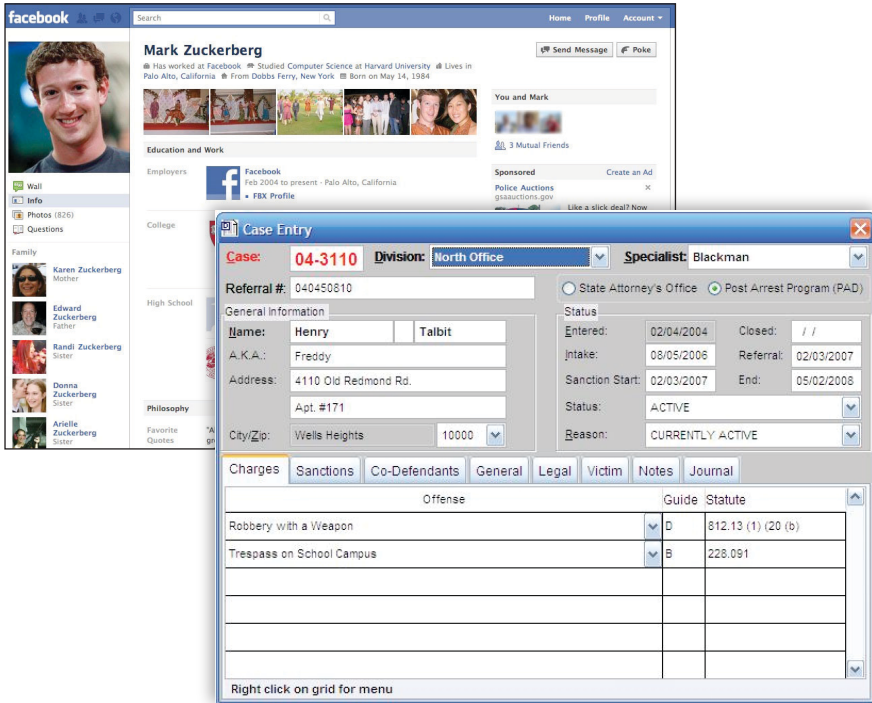
Fig.11 & Fig.12 Our online selves must submit our personalities to absolutist databasing.

Social networking and our other online interactions force us to reduce ourselves into a template that is translatable across the Internet, standardised for easier classification, much like the stratified society of *Brave New World*. Much attention has been brought to the worrying potential of *Facebook* if its database of humans were to fall into the hands of some sinister marketing corporation as it represents the world's

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3   Lanier, *You Are Not A Gadget*, 71

largest consumer catalogue. Lanier militantly highlights the concerning dystopian undertones of our online impressions: 'If a church or government were doing these things, it would feel authoritarian, but when technologists are the culprits, we seem hip, fresh and inventive. People will accept ideas presented in technological form that would be abhorrent in any other form.'[4]

His generalisation seems to imply that technology dazzles and subverts our sensibilities towards our own human needs but it's out of necessity and inexperience that we reduce ourselves on the web. The needs for psychological feedback and immersion that the web provides drives us to submit to its absolutist reductions and since we've never known technology to speak another language, we accept it, even relish it, unlike we do totalitarian governments.

Toward a Higher Resolution

Social networks and the current state of our online presence only allow a discontinuous version of our fluid and intangible selves but we're at the very earliest stage of what will inevitably be a long future of human presence on the Internet. These early social networks, like all early technologies are low-resolution. They provide only the most basic criteria to reproduce an individual online and it's primarily because of their failings that reductionism occurs.

Sherry Turkle cites the example of an individual who instead of voraciously and deliberately trimming his online life to reflect the 'best' him as encouraged by the confines of social networking, records everything indiscriminately in the hope that "a picture of my life will emerge from, well, all the pictures of my life."[5] 'Lifeblogging' – the continuous, wholesale recording of an individual's life – is slowly gaining popularity as computer memory and speed increases and a future of our digital lives, unreduced and in much higher resolution can't be too far off giving us each a more accurate reflection of the non-absolute nature of our personalities.

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4 Lanier, *You Are Not A Gadget*, 48
5 Turkle, *Alone Together,* 89

The Common Language

It's impossible to draw any form of conventional conclusion from this dissertation, and so this isn't one. The Internet mind is young, as is fiction on the Internet and all that I'm left with after a better understanding of the transitions at play and their initial effects are more questions.

We chose to reduce ourselves and our narratives to the fragmented parts readable by the Internet because of the psychological kicks we gain from it, because the Internet is a more sensitive and responsive abstract of reality than literature. It presents a database of the world more familiar than the linearity of a conventional narrative and so is easier to draw rewards from. Instead of the 'corruption' that literature suffers on the Internet we might look at it as reverse engineering to a form more recognisable to the human mind – the illogical, delinear, high-resolution world of narratives that we live in.

The reduction of ourselves and our abstract reflections to fragmented units lends plausibility to the at once exciting and terrifying future of a direct, common bond between humanity and the machines: 'According to a new creed, we technologists are turning ourselves, the planet, our species, everything into computer peripherals

attached to great computing clouds.'[1] In a sinister, Huxleyan dystopia, our digital symbiosis would make us easily manipulable in the machinations of the state. Alternatively of course, the opportunities afforded through this shared language could extend our abilities, increase our sensitivity and draw us closer through artificial, digital extensions of the mind, beginning now with the Internet.

The bewaring arguments of the Internet are plagued with nostalgia for the reading mind and the form of a book. A type of mind and media seems that seems irrelevant in a world inexorably heading towards greater levels of computer/human integration. With 'bibilionecrophilia'[2] we run the risk of overlooking the emerging forms of narrative that the digital world will present. Will future psychologists define fiction along different paradigms to Keith Oatley? In the digital world, the orientating response and the ability to filter information rapidly provides advantage to the user, how will fiction remodel itself to fit in with these new psychological templates?

As emphasised earlier, we and our narratives are only at the very beginning of our time on the web, and much like the printing press' early catalogue of pornography and advertising pamphlets, we have far to go. As the technology that powers our symbiosis advances, the interfaces and languages between the computers and ourselves will become more continuous and of higher resolution. New fictions will develop across this common language.

This disssertation has primarily served the role of a clarification and elucidation agent for anxieties and inquiries I have held for some time but have never as singularly grappled with. As a designer, I take on the mantle of an author, and I must be aware of all the forms of authorship abound in technology. Now, it's vital for me to be conscious of the motivations of the Internet mind and to build the vitality of narrative with its desires held in consideration. I also find myself awakened to the variety of fictions abound in the digital realm. We can no longer count our narrative forms on one hand and while I must be wary of the pitfalls of the *feelies*, I can't, in my practice, exclude oppurtunities that might lead to insights on forms of narrative more reflective, stimulating, invigorating and meaningful than anything that has gone before.

I can only be confident that fiction will never become eradicated as per dystopia. We will, as always, drag it through technological history, allowing it to mutate and evolve through the media and languages we surround ourselves with.

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1   Lanier, *You Are Not A Gadget*, 48
2   Ben Ehrenreich, *The Death of The Book*, Los Angeles Review of Books, 18th April 2011 http://lareviewofbooks.org/post/4659371294/the-death-of-the-book (accessed 18/04/2011)

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