

ITH - Centrum för studier av IT ur ett humanvetenskapligt perspektiv
vid Högskolan i Borås

2-3/2001

Even Better than the Real Thing

- Counterfeit realities and twentieth century dystopian fiction¹
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*In recent years, the theme of artificial and/or mediated reality has been recurrent in popular cinema (The Matrix, The Truman Show, The Cell, etc.). This trend reflects a growing awareness of how information technologies obfuscate traditional boundaries of what is real and what is not. The article draws a cultural background to these films, and, by extension, to our so-called age of information by examining a number of older fictional works in which technologies of representation and simulation are explored in more or less dystopian terms. In a trajectory including otherwise unrelated works, such as J. K. Huysmans' *Against Nature* and William Gibson's *Neuromancer*, we find a number of familiar themes and images presented with a striking degree of continuity: the neglect of the body, the deterioration of social and familial bonds, the loss of history and literary culture, the retreat from reality into a world of engineered hallucinations.*

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At the end of the millennium, a number of science fiction films were released which were all about artificial realities made possible by advanced technology. *The Truman Show* (1998), *The Matrix*, *eXistenZ*, *The Thirteenth Floor* (1999) and *The Cell* (2000) all presented fantastic and unsettling scenarios, in which the protagonists are the witting or unwitting participants of simulated worlds, complete with nature, people, buildings and food. In *The Truman Show*, a young man gradually comes to realise that his entire existence is fake: his family and friends are actors, his hometown is a giant television studio. *The Matrix* presents the world as a gigantic computer animation, fed directly into the brains of a humanity cultivated as a source of energy for a race of machine beings. Both *eXistenZ* and *The Thirteenth Floor* place simulated worlds inside each other like Chinese boxes, while *The Cell* explores the idea of manifesting the symbolic material of the human unconscious as a phenomenally complete physical environment.

If Hollywood's apparent interest in producing films of this kind in any way can be seen as indicative of a *Zeitgeist*, one might suspect that at the end of the millennium, "reality" (always a problem for philosophers), is now taken anything but naïvely by large portions of the public. The psychological, philosophical and, notably, political consequences of the media and information technologies have been debated at least since the 1960's. Recently, however, in the era of virtual reality, computer animations, on-line games and real life television, the fact that reality is increasingly conflated with, and obscured by, technologically mediated "hyperrealities" has apparently come to loom large on a broader cultural horizon. This development is strikingly illustrated by the use of a copy of Jean Baudrillard's classic of postmodern theory, *Simulacra and Simulations*, as a prop in a film otherwise filled with Kung Fu action and stunning special effects (*The Matrix*). Of course, these films are themselves, as it were, part of the problem, since they depend on cutting-edge visual effects in order to convey the power of the illusion as convincingly as possible. Nevertheless, they do address the philosophical, moral and political problems raised by technologised man's ever increasing ability to supplement unmediated, "natural" sensory environments with those of his own making.

The apparent postmodern contemporaneity of these films becomes less conspicuous, however, in the perspective of literary history, where the issue of artificial realities and mediated sensory experience has been addressed in dystopian

fiction and science fiction long before the rise of network television and computer simulations. In this article, I will attempt to draw a cultural background to the films cited above, and, by extension, to our present so-called age of information. The study examines a number of fictional works in which the technologies of representation and simulation are explored in more or less fantastic terms. The investigation will juxtapose works not usually related in literary historiography, such as J. K. Huysmans' *Against Nature*, Aldous Huxley's seminal dystopia *Brave New World*, and obscure science fiction stories, in an attempt to show how the potentials and, above all, the hazards involved in

technologies of representation and simulation have been negotiated in a pre-computer era. In this corpus, humanist, liberal and puritan stances are articulated in a number of familiar images and "memes": the neglect of the body, the deterioration of social and familial bonds, the loss of history and literary culture, media addiction – ultimately, the more or less permanent retreat from reality into a world of engineered hallucinations.

While not connecting the recent films mentioned previously directly to this tradition, I will follow the trajectory into the digital age and William Gibson's quintessential cyberpunk novel *Neuromancer* (1984), which provided the burgeoning information revolution with a defining myth, and rendered previously rather esoteric notions from the fields of cybernetics and artificial intelligence in the language and narrative strategies of popular culture.² Gibson and cyberpunk are usually regarded as specifically postmodern phenomena, but this mapping of a largely unexplored dystopian terrain shows how *Neuromancer* continues the humanist tradition in certain important respects, and thus constitutes a less radical break than is often assumed.

Ever since the palaeolithic cave paintings, the boundaries between reality and representation have been explored and challenged through different techniques in the visual arts, in theatrical design and mass market entertainment. Until the early twentieth century, the issue was discussed mainly in the fields of aesthetics and philosophy, and seldom, if ever, deemed socially or politically relevant. Until Romanticism and the emerging aesthetics of originality, the ability to render a perfectly lifelike illusion was rather a cause for admiration, especially during the Renaissance, when the faithful representation of physical reality became a chief artistic concern. In the *Decameron*, Boccaccio praises the painter Giotto for creating images which were "rather as the thing itself",³ while the Platonist Marsilio Ficino celebrates past masters of the *trompe l'oeuil*: "Zeuxis painted grapes in such manner that the birds flew to them. Apelles painted a steed and a she-dog in such manners that in passing by horses would neigh and dogs bark."⁴

In Renaissance theatre, the discovery and gradual refinement of central perspective and the development of advanced special effects led to increasingly convincing illusions.⁵ Baldassare Castiglione was impressed by a stage production in which the "streets looked as if they were real",⁶ and the architect Vasari enthusiastically witnessed a comedy with buildings "all made to make them appear to be what they represent".⁷ The technical innovations of the Italian stage were adopted and improved on in the courtly entertainments called masques, which were popular at European courts, particularly in England. Today the form is perhaps most familiar from Shakespeare's *The Tempest*, as the allegorical play-within-the-play which Prospero has his spirits perform in act IV. The masque reached its peak in the English Jacobean and Carolinian courts, in the pieces resulting from the collaboration between Ben Jonson and the architect Inigo Jones. It combined music, dance and drama in allegorical scenes based on mythological events, and Jones brought stage mechanics to new heights in order to acquire maximum illusory effects.

Theatrical historian Stephen Orgel makes the interesting observation that the masque intended to show the human power over the universe, by creating "an alternative heaven" where the king, in his role as divine creature, asserted "his control over his environment and the divinity of his rule through the power of the art at his command."⁸ Within the fiction of the masque, the power of the King/God was magical, but what the masque really manifested through its elaborate machineries, Orgel asserts, was the power of science and technology over nature. The court audience saw the masque "with its scenic illusions and spectacular machines [...] as models of the universe, as science, as assertions of power, as demonstrations of the essential divinity of the human mind."⁹ Orgel sees the same ideology expressed in Ficino's previously cited essay, in which the author hails the almost divine powers bestowed upon man by technology:

*[S]ince man has observed the order of the heavens, when they move, whither they proceed and with what measures, and what they produce, who could deny that man possesses as it were almost the same genius as the Author of the heavens? And who could deny that man could somehow also make the heavens, could he only obtain the instruments and the heavenly material, since even now he makes them, though of a different material, but still with a very similar order?*¹⁰

Provided with the right tools and know-how, man "could also make the heavens" – as we shall see, in his remarkable faith in technology to propel man to a position of semi-divine creator, Ficino anticipates several descriptions of cyberspace, e.g. Michael Benedikt's view of a "new universe, a parallel universe created and sustained by the world's

computers and communication lines".¹¹ Furthermore, the masques illustrate the important fact that the notion of artificial realities need not be reserved for those constructs which aim at slavish representation or simulation of actual reality, the world as we perceive it. They presented mythological and magical events aimed at the perfect illusion of non-existent phenomena, simulacra rather than representations. The masques are thus strikingly analogous to present-day visions of the potential of cyberspace, in which the freedom to render manifest all manner of phantasmagorical forms is frequently foregrounded.¹² Cyberspace discourse hence appears to be distinctly Renaissance in spirit, situating the cybernaut in the role of the supreme maker, like Prospero conjuring up a second nature through his magic, science, or art.¹³

The masque has been deemed instrumental in a phase of decline of the English theatre, when poetic and dramatic content, central to Elizabethan playwrights, became increasingly obscured by visual effects.¹⁴ Jonson himself attacked the "omnipotent design" of his former partner Jones, in a famous diatribe in which the masque is seen as symptomatic of an age of spiritual hollowness and greed: "Painting and carpentry are the soul of masque. / Pack with your pedling

poetry to the stage, / This is the money-got, mechanic age."¹⁵

Jones' diatribe is not only the expression of wounded professional pride, but also reflects the view, common in Protestant Europe, that the spectacular illusion so celebrated by the Italians is a sign of decadence and degeneration. This view goes back to Aristotle's low appraisal of "the spectacle" in *The Poetics*, and has since been reinforced by puritan attitudes, as well as by the influential view that the illusion appeals first and foremost to children and to the aesthetically unsophisticated mind.¹⁶ It is not difficult to discern this tangled heritage in high- to middlebrow attitudes towards the special effects of contemporary Hollywood film, and other "spectacular" forms of entertainment. As we shall see, it also informs the dystopian tradition to which we now turn.

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1. The terror of direct experience

The first work to take up the issue of the counterfeit reality at any length is J. K. Huysmans' *Against Nature (À Rebours)*, 1884), regarded as the central literary document of the so-called decadent movement, which thrived during a period in European history when the concept of degeneration and the imminent demise of Western civilisation were topical in the intellectual debate and public consciousness.¹⁷ In the decadent ethos, apocalyptic sensibility merges with aestheticist and hedonist attitudes, summarised in catchphrases such as *fin de siècle – fin du globe* and *après nous le déluge*. The decadents, drawing on Baudelaire, Poe and de Quincey, celebrated the "artificial paradises" provided by art, poetry, sexuality and/or drugs to escape the drabness of contemporary bourgeois existence. But whereas the typical decadent stance is one of scepticism towards all manifestations of modernity, Huysmans' hero, the hypersensitive degenerate nobleman des Esseintes, escapes the outside world through state of the art technology, arguably a series of mechanical virtual realities, the pursuit of which eventually leads to his physical and mental breakdown.

des Esseintes barricades himself in his Paris house, where he becomes increasingly obsessed with creating various kinds of artificial sensations. His main interest is odours, but he also invests a fortune in minutely reproduced spatial environments, the most ambitious being an artificial marine simulator, complete with "marvellous mechanical fish, driven by clockwork, [which] swam past the porthole windows and became entangled in imitation seaweed".¹⁸ The gadget described is reminiscent of the panorama, and other simulation devices which were developed for purposes of education and entertainment during the 19th century.¹⁹ While probably inspired by panorama techniques, it also prefigures the mareorama, a panoramic device introduced by the brothers Lumière at the 1900 World Fair, where the spectator entered a cabin and was subject to a sea-journey, complete with rolling movements and waves projected on screens behind the portholes.²⁰ Like the mareorama, des Esseintes' contraption allows the user to savour the pleasures of travel in ideal form, without bodily inconveniences to mar the actual experience:

*In this manner, without ever leaving his home, he was able to enjoy the rapidly succeeding, indeed almost simultaneous, sensations of a long voyage; the pleasure of travel – existing as it largely does only in recollection and almost never in the present, at the actual moment when it is taking place – this pleasure he could savour fully, at his ease, without fatigue or worry. [...] Besides, he considered travel to be pointless, believing that the imagination could easily compensate for the vulgar reality of actual experience. In his view, it was possible to fulfil those desires reputed to be the most difficult to satisfy in normal life, by means of a trifling subterfuge, an approximate simulation of the object of those very desires.*²¹

He further fantasises how an artificial environment could be evoked through a proper combination of synthetic fragrances produced on an industrial scale and spread from open stoves all over Paris. The result would be that workers could receive the invigorating effects of country air without the expenditure of travel, while at the same time being spared "the deadly boredom" of the countryside. With the aid of a "fairly fertile imagination", old lechers can be provided with an olfactory "Platonic substitute" of brothels and prostitutes without suffering the consequences. And, not to forget, "harsh nature has no part in this extraordinary phenomenon"; it is made possible by "industry alone".²² Technology makes possible the idealist cleansing of nature which, prior to an industrial age, only art could provide. The whole line of argument brings to mind Ficino's previously cited celebration of man as *Deus Creatrix*, who "imitates all the works of divine nature, and perfects, corrects and improves the work of lower nature."²³

The purpose of any technology is always control, and, in a psychological perspective, des Esseintes' obsession with sensory manipulation seems to be symptomatic of a compulsive need for control. This is carried into the social sphere, as des Esseintes' experiments include the attempt to transform a young boy into a murderer through conditioning. He introduces the boy, a street urchin, to a life of luxury and promiscuity in a brothel. Once the subject has gotten used to his new existence des Esseintes hurls him back into the street, in the expectation that the bereavement will ignite the homicidal impulse. The endeavour manifests the lack of morality which results from a life devoted to artifice, and anticipates a much later fictional study of non-natural human states, William Burroughs' *The Naked Lunch* (1959). In Burroughs' novel, which reflects the advent of the cybernetic paradigm and the conflation of biology and technology, the demoniacal Dr Benway engages in idle speculation on how to make a heterosexual man homosexual by drugs, hypnosis, and by "depriving him of cunt and subjecting him to homosex stimulation".²⁴

des Esseintes' experiment in behavioral psychology fails, as does his entire lifestyle. The sterility of his pursuits is

signalled by the fact that he is impotent, and, towards the end of the novel, he deteriorates both physically and psychologically. He is forced to accept nourishment through the colon (a feat which is metabolically impossible, a fact of which the author was possibly unaware), which he considers a personal triumph, "in a sense the crowning achievement of the life he had created for himself; his predilection for the artificial had now [...] achieved its supreme fulfilment; one could go no further".²⁵

While the author is obviously fascinated by the idealist potential of simulation technologies, and sympathetic to the revulsion felt by the hero for the drabness of everyday life, this ending validates a reading of the novel partly as satire, and acknowledges the futility and destructiveness of an existence in which corporeal and natural concerns, as well as normal social bonds and obligations, are eclipsed by the pursuit of the ideal artifice.

des Esseintes is a leisured aristocrat, free to indulge in his orgies of artificiality due to the financial independence his class enjoys, and, apart from the whimsical scheme of distributing "country air" from factory chimneys for the benefit of Paris workers, his ideologisation of artificiality is wholly removed from societal contexts. It is symptomatic that he anticipates the mareorama, a mass market medium, with no other object than personal gratification, a means by which to explore the subtleties of sensory stimuli in aristocratic isolation.

In dystopian fiction of the twentieth century, however, the "artificial paradises" provided by technology are frequently projected as collectively experienced phenomena, and their degenerative effects hence take on disastrous proportions, as fundamental cultural values and institutions crumble under the corrupting influence of collective escapism. The motif is integral to the anti-technological dystopian tradition and, in the typical scenario, the engineered realities follow logically from those vaster forces of modernity which, according to Romantic humanism, alienate man from nature, from his fellow man and from his inner being; scientific materialism, rationalism, and instrumental utilitarianism. The artificial worlds are frequently assumed to be a more or less direct result of the automation of society, thus being a tool in the liberal critique of the notion, central to technological utopianism, that machines will eventually leave men and women free to pursue loftier ambitions than mere toil.²⁶

While championing such "illogical" expressions of humanity as intuition, creativity, passion, etc., in the face of impending technologisation and rationalisation, these fictions warn us that the possibility of supplementing ordinary reality with engineered hallucinations will inexorably lead to a slackening of morals and ultimate degeneration of the species. This thematic complex is, of course, informed by the Darwinian idea of "the struggle for survival" as a necessary condition for evolution. In this context, we also observe that the motif of childlessness is practically ubiquitous in the tradition (des Esseintes is the last of his line, and impotent to boot), and the inherent sterility and ultimate doom of a society which turns its back on a "natural" life of duty, work and authenticity is made clear in the consistent foregrounding of the corruption or absence of family ties.

In this predominantly Anglo-American tradition, we also discern reflections of the Puritan ethos and its insistence on the moral dictums of diligence and industriousness. Both the condemnations of promiscuity and of idleness are echoed in the identification of sexuality as the main outlet for the regressive escapist impulse, and in the frequently encountered image of the bloated, unwholesome denizen of the "electronic womb". More importantly, we observe that the entire

notion of a technological representation and simulation of physical reality is inimical to the Puritan spirit, with its adamant insistence that God's will is best served by practical engagement in the affairs of the world. Puritanism, partly as a result of its need to distance itself from Catholic liturgy, is traditionally suspicious towards spectacles and delight in the visual, as manifested in the closing of the English theatres in 1642.²⁷ A related, if less iconoclastic, aspect of the Puritan spirit is evident in the empirico-rationalist view on education and learning developed in the 17th and 18th centuries in England and New England, where direct observation of God's work was favoured over written authorities and philosophical speculation.²⁸

The scenario of an idle mankind wasting its powers in the grip of automation and technologically mediated experience is first elaborated in E. M. Forster's novella "The Machine Stops" (1909), a seminal dystopia attacking instrumental rationality and overconfidence in technology. The story was partly conceived as a reply to the utopianism of H. G. Wells, and approaches the vitalist anti-intellectualism of D. H. Lawrence in its portrayal of an increasingly technologised mankind's development into ever higher levels of rationality as a process of retrogression rather than of progression.²⁹

In "The Machine Stops", a spiritually and physically atrophied future humanity has abandoned every contact with natural environments, and dwells in a wholly automated subterranean global society, where it is tended by the ubiquitous Machine, an immense, self-regulating and self-evolving technical system. The Machine is regarded with religious awe, and when it finally collapses mankind is doomed. The story is thus expressive of the pervasive view that we no longer can control technological development, but have become slaves to our own creations.³⁰ The Machine, Forster has his hero exclaim, "develops – but not on our lines. The Machine proceeds – but not to our goal",³¹ words which echo in countless humanist attacks on science and technology throughout the last century.

But Forster's main emphasis is on how information technologies specifically isolate humans from each other and from direct contact with nature, and thus deplete life of depth and meaning.³² Practically no technologically unmediated social activities exist: individuals live out their days in cells where they interact through a videophone system and

social activities exist, individuals live out their days in cells, where they interact through a microphone system and receive all knowledge and entertainment from home terminals. This channeling of human intercourse and sensory experience through technical networks has perverted the ability to appreciate the ineffable dimensions of either:

*the Machine did not transmit nuances of expression. It only gave a general idea of people – an idea that was good enough for all practical purposes [...]. The imponderable bloom, declared by a discredited philosophy to be the actual essence of intercourse, was rightly ignored by the Machine, just as the imponderable bloom of the grape was ignored by manufacturers of artificial fruit. Something "good enough" had long since been accepted by our race.*³³

The woman Vashti, one of the protagonists and a representative member of this society, is "seized with the terrors of direct experience"³⁴ when confronted with the prospect of actually meeting her son face to face – a denial both of unmediated reality and of her own motherhood.

The avoidance of direct experience and bodily movement is fused with a sterile intellectualism; mankind's only pastime is the production of "ideas", the more abstract the better. A renowned historian admonishes his audience: "Let your ideas be second-hand, and if possible tenth-hand, for then they will be far removed from the disturbing element – direct observation."³⁵ The satire is thus also expressive of an empiricist attitude partly rooted in Puritanism and prevalent in English thought during the Victorian and Edwardian eras.³⁶

As was the case with des Esseintes' artificial paradises, the automated informational society has made travel all but redundant, since a standardised global culture has eradicated cultural differences: "What was the good of going to Pekin when it was just like Shrewsbury? Why return to Shrewsbury when it would be just like Pekin? Men seldom moved their bodies; all unrest was concentrated in the soul."³⁷ The redundancy of the body is also ideologised; it is "a demerit to be muscular", and Vashti is first presented as "a swaddled lump of flesh [...] with a face as white as a fungus".³⁸ She is also hairless and toothless as a baby or senescent woman – mankind's future cerebral existence rendered as regressiveness.³⁹

Her son Kuno, however, is passionate and physically able and hence branded as an atavism by the Machine. Denied by his mother, and desperate for genuine and authentic experience, he escapes, through an airshaft, from this world of artificiality and human isolation to the surface of the earth (which has been deemed uninhabitable by the Machine), to discover humans living dignified and full lives close to nature. Faced with the fact of humanity's spiritual self-mutilation, he diagnoses the chief illness afflicting this information society as a denial of the corporeal aspects of existence, and repeats one of humanism's basic tenets: "Man is the measure. [...] Man's feet are the measure for distance, his hands are the measure for ownership, his body is the measure for all that is lovable and desirable and strong."⁴⁰ The machine,

he states further, "has robbed us of the sense of space and of the sense of touch [and] blurred every human relation".⁴¹

Forster allows for an ambiguous hope, as the story ends with the breakdown of the Machine, and subsequent annihilation of the civilisation it has spawned. While a helplessly enfeebled humanity faces mass extinction, the unspoilt denizens of the surface wait to take over, and Vashti and Kuno, reunited in their dying moments, disagree as to whether the same mistake will be repeated; "some fool will start the Machine again, to-morrow", claims Vashti, while Kuno asserts that "[h]umanity has learnt its lesson". The last image is hopeful: an airship crashes through the ceiling and allows them a final glimpse of "the untainted sky".⁴²

Forster's story primarily recognises the consequences of information technologies for human interaction and administration insofar as they are instrumental in steering mankind away from a healthy and natural sensuality towards narrowly intellectual pursuits. However, later fictions dealing with machines providing vicarious experience have taken their cue mainly from the entertainment and media industry, and projected dystopian scenarios in some respects diametrically opposed to Forster's anti-intellectualist celebration of bodily experience. Whereas demands for truthful sensory representation have declined in "The Machine Stops", and people are content with a video telephone system that is unable to convey "nuances of human expression", most especially the film industry's striving for ever more convincing illusions have prompted fictions where mankind abandons the dullness of ordinary life in favour of artificial realities replete with sensual (mainly sexual) experiences superior to those provided by reality. But, it is worth noting, the Puritan moral code is reflected both in the anti-hedonist stance and in Forster's anti-intellectualism.

With the rise of the film medium, the technological destabilisation of the relationship between original and copy was increasingly perceived by conservative critics as detrimental to the perceptive faculties, and, film being a mass market medium, to the spiritual health of culture as a whole. In Horkheimer and Adorno's influential critique of the modern project, *The Dialectic of the Enlightenment* (1944), the inferiority of the medium stems from its increasingly faithful reproduction of reality, which blurs the distinction between original and copy:

The whole world is made to pass through the filter of the culture industry. The old experience of the movie-goer, who sees the world outside as an extension of the film he has just left (because the latter is intent upon reproducing the world of everyday perceptions), is now the producer's guideline. The more intensely and flawlessly his techniques duplicate empirical objects, the easier it is today for the illusion to prevail

*that the outside world is the straightforward continuation of that presented on the screen. This purpose has been furthered by mechanical reproduction since the lightning takeover by the sound film.*⁴³

The inability to separate reality from illusion, which during earlier epochs had caused few, if any, moral concerns, is now a sign of the baseness of the film medium. It "leaves no room for imagination and reflection on the part of the audience, where these [...] may withdraw and fantasize on their own." The equation of the film and reality causes the "stunting of the mass-media consumer's powers of imagination and spontaneity".⁴⁴ (We note that the authors' judgement seems wholly based on realistic cinema, although the medium had proven its ability to transcend representation of existing nature already from the start, e.g. in the films of George Méliès.) Adorno and Horkheimer's critique of the medium goes beyond its shortcomings as art, that is, its ability to deliver valid aesthetic experience, and invests it with apocalyptic significance. "Stunting" ("Verkümmerung") is a key word here, with its connotations of disease and degeneration. The belief that ever more sophisticated technologies of representation cause or accelerate a downward movement of civilisation as a whole is manifested countless times in twentieth-century dystopian fiction.

Sustained fictional speculations on the cultural significances of a medium which aimed at a minute representation of reality began in the 1930's, largely prompted by the adding of sound to the cinema in 1927. Aldous Huxley projected this escalation of sensory representation in the influential *Brave New World* (1932), which depicts a utilitarian and conformist future society, where all potential discord among the populace is pre-empted by the drug *soma* and the "feelies" (an obvious reference to "talkies"), a media technology presenting stereoscopic images, accompanied by "scent organs" and tactile sensations channeled through metal handles. (The association between electronical and chemical artificial realities is, as we shall see, recurrent in this dystopian tradition.) In *Brave New World*, *soma* is the main instrument for political control; it distracts the citizens from reflection and introspection, intellectual activities which might lead to a questioning of the values on which this world-state rests. Its function is similar to that of feelies, as it provides "a holiday from reality", and the dosage is carefully measured according to the desired effect: "half a gramme for a half-holiday, two grammes for a trip to the gorgeous east, three for a dark eternity on the moon".⁴⁵ The feelies and the *soma* are thus products and tools of a materialist and instrumentalist view on the human being: a system subject to control through electrical and chemical means.⁴⁶

In the world of 632 A.F. ("After Ford"), children are genetically designed and grown in fertility plants through a process prefiguring cloning; birth is replaced by "decantation" from a glass bottle which functions as a womb. Any reference to motherhood is deemed obscene. In a rich passage, pre-natal bottled existence is foregrounded as metonymical of the regressive course of a society which imposes a "happiness" wholly removed from natural experiences and emotions. A cabaret chorus celebrates the "bottle" as a safe pocket universe: "Bottle of mine, it's you I've always wanted!/ Bottle of mine, why was I ever decanted?/ Skies are blue inside of you,/ The weather's always fine".⁴⁷ The *soma*-induced euphoria experienced by two of the protagonists is described in the song's imagery, and a marine image accentuates the regressive infantilism of this culture: "They were inside, here and now – safely inside with the fine weather, the perennially blue sky [---] they might have been twin embryos gently rocking together on the waves of a bottled ocean of blood-surrogate."⁴⁸

As for the feelies, they are apparently recorded, but manipulated to be more intense than any natural sensory experience. The actors appear on the screen "dazzling and incomparably more solid looking than they would have seemed in actual flesh and blood, far more real than reality".⁴⁹ When they kiss, the sensation is conveyed to the audience, whose "facial erogenous zones [...] [tingle] with almost intolerable galvanic pleasure." During a sexual encounter on a bearskin rug, "every hair [...] [can] be separately and distinctly felt" by the audience.⁵⁰ This mechanism bears a resemblance to the cleansing of reality to which des Esseintes aspires in his artificial environments, expressive of a romantic/symbolist aesthetic, but the feely only provides an intensification with no further qualifications; the enhanced sensation of the bearskin carries no meaning beyond the mere sensory data and the erogenous effect they produce. According to Adorno and Horkheimer, the inferiority of the medium stems from its increasingly faithful reproduction of reality, which blurs the distinction between original and copy. In *Brave New World*, an even greater betrayal of our senses takes place, as the representation is phenomenally superior to the original experience. While the conflation of reality and its representation in the film medium destabilises the hierarchy of experiential modes, the dystopian feely inverts it.

These wonders of utilitarianism and hedonism are partly reported through the eyes of "the Savage", a young man raised in an Indian reservation where life is harsh but filled with a natural spirituality and dignity. After accepting an invitation to visit the modern world, the Savage becomes increasingly appalled by the lax morals and spiritual shallowness confronting him, and ultimately claims the right to be unhappy – to experience all the pains and vicissitudes of life unalleviated by chemical and electronical escape routes. He escapes society to an old lighthouse, and seeks to drive out "the filth of civilised life, [...] to be purified"⁵¹ by hard manual labour and flagellation, thus embracing an ascetic ideal incorporating both Puritan and Catholic elements, while also re-enacting an initiatory rite from his native tribe. Pain and discomfort were important values in the Victorian and Edwardian mentality, allied both to the Puritan ethos and to the Darwinian tenet of the struggle for life. Huxley's grandfather and Darwin's apostle, T. H. Huxley, saw pain as an unavoidable and necessary condition for evolutionary progress and, by inference, for human dignity: "we should cast aside the notion that the escape from pain and sorrow is the proper object of life".⁵² *Brave New World* can, in fact, be read in its entirety as one sustained argument defending this belief.

Obviously, Kuno's revolt in Forster's "The Machine Stops" anticipates that of the Savage, but whereas the former heralds

Obviously, Kane's revolt in *Forster's The Machine Stops* anticipates that of the Savage, but whereas the former heralds the downfall of the artificial society, Huxley's future remains stable. Two young men who have questioned the system, and felt a tentative kinship to the Savage, are weeded out and exiled to isolated colonies where they cannot cause any trouble. The Savage himself is driven to suicide from shame and guilt, after having finally succumbed to promiscuity and *soma* in an all-night orgy arising spontaneously among a crowd of onlookers gathered to gawk at his flagellations. This interest in its turn is caused by the paparazzi production of a "feely" with the Savage as the unwitting star. His surrendering to the animal sexuality he tries so desperately to cleanse is thus analogous to a much more significant and unsettling defeat, described by Jean Baudrillard some forty years after the publication of *Brave New World*, in which every revolt, every gesture of dissent is rendered harmless by being represented in an already wholly commodified system of signs and images: "transgression and subversion never get 'on the air' without being subtly negated as they are: transformed into models, neutralized into signs, they are eviscerated of their meaning".⁵³

Huxley's influence on twentieth-century dystopian imagination cannot be overstated, but by the time of the publication of *Brave New World*, the consequences of artificial experiences had already been explored in even more drastic terms in Laurence Manning and Fletcher Pratt's pulp science fiction story "City of the Living Dead" (1930), of whose existence Huxley was probably totally unaware.⁵⁴ The story tells of the quest for the perfect illusion as a degenerative process which ultimately serves the interests of a financial elite, ending in a humanity kept in electronic cocoons and fed with artificial dreams – an idea since exploited frequently in sf, most recently in *The Matrix*. Manning and Pratt identify the disappearance of danger and adventure from the world as the cause of the waning of mankind – a notion familiar from the degeneration discourse of the 19th century, updated to an era of automation.⁵⁵ In Manning and Pratt's automated future, the only occupation left to men after "the Machines" have done their work is "the frantic pursuit of artificial pleasure". Like legions of des Esseintes, "men become connoisseurs of odours" and spend fortunes on perfumes and clothes.⁵⁶

From this situation a business concept is born which seems prescient of today's so-called adventure vacations, role-playing games and "reality television". The details of how this comes about deserve to be quoted at some length:

It began with a Japanese named Hatsu Yotosaki, who was hired to furnish new amusements – "thrills" they called it – to a party of rich Australians who had gone on an extended air voyage over Antarctica. The Jap conceived the idea of letting each member of the party know, indirectly, that some other one of the party was a criminal lunatic who was scheming to murder him. Long before their six months' cruise was up, they were all eying each other with suspicion and fright [...]. Three of them were even killed by mistake.

When they got back to Melbourne, Yotosaki told the survivors the story of how he had manufactured their fear and fright. Instead of jailing him for murder, they hailed him as a deliverer, the founder of a new idea. The idea was taken up with enthusiasm, and everywhere men were hired by others to involve them in wild and impossible, often bloody, adventures.

But even here the scientists tried to intervene with their Machines. Why, they argued, go to all this trouble and expense to provide adventures for oneself, when one could obtain them second-hand by attending the mechanized theatres? The answer of the public was that the second-hand adventures of the theater were insipid, being without the element of personal contact; they gave the spectator none of the personal thrill that is part of real adventure. This led to the formation of great companies to furnish adventures to people.⁵⁷

This development worries "the governments of the world" as it threatens the goal of keeping the populace safe and free from worries, so they set their scientists to the task of developing "an antidote to the adventure companies", resulting in various ways of enhancing the cinema experience by creating immersive environments:

They had already perfected sound and motion in the earlier ages; to this was now added a device that added the sense of smell [...]. But the people tired of these shows [...]. The scientists then produced the sensations of heat and cold – people went to winter pictures wrapped in furs as though for a trip to the arctic regions; vast artificial winds stormed through the theaters to the tune of the swaying boughs in the pictures; clouds of smoke and tongues of veritable burning flame were rolled out over the audience; and at last devices were introduced which gave the sitters gentle electrical shocks at emotional moments in the performances.⁵⁸

The movement towards the totally artificial sensory environment is crowned with the discovery of what we would call neural interface when a surgeon develops a technology for direct connection between neural ends and "artificial metal nerves", based on the neurophysiological fact that "all nervous impulses are delivered by electrical means".⁵⁹ Before long, blind people are equipped with photosensitive cells in their eye sockets (a device which today, incidentally, is the subject of actual research), and the inevitable disastrous conclusion is drawn, namely, that such a technology enables the final abandonment of reality: "If a man could by these means see what really happened, why should he not also see things that have never occurred?"⁶⁰

The final phase in this carefully related apocalyptic scenario is the construction of "adventure machines", which eventually lead to the downfall of human civilisation when no one opts to face the vicissitudes and adversities of real life. The subject is surgically deprived of all natural sensory organs, and recorded data are fed directly into the brain:

*Thus if the operator wished to make the adventurer feel that he was hunting, the record of a hunting adventure was placed in the Machine, and the cable leading from the adventurer's nerves was connected to it. The nerves of the adventurer's foot would assure him that he trod the mould of the forest; the nerves of his eyes would bring him a vision of the dim vista of trunks and a wild animal bounding through them; the nerves of his hands and arms would tell him he was making the correct motions to take aim and bring the animal down; and through the nerves of his ears, the Machine Adventurer would hear the dying scream of the beast he had slaughtered.*⁶¹

The primitivist scenario and the meticulous reconstruction of the bodily experience illustrate the nostalgia for a whole and meaningful human existence which, according to the assumptions first articulated by Forster, would befall us in an automated society. Unlike Forster, who sees in representational technology only a reduction of the richness of direct sensual experience, and unlike Huxley, who renders it a simple augmentation of sensory input, Manning and Pratt allow technology to compensate for the loss it has caused, responding to a yearning for a heroic, pre-technological phase in human history. The technology firmly in place, it fulfills any form of human desire, not only those directly compromised by the automation of society. We learn that "the glutton, the drunkard, the man mad over women found here his own special paradise", hedonistic pursuits of a more overtly regressive nature.⁶² Manning and Pratt also realise that a technology which separates mind from body would have the potential to fulfill transcendental longings, as it allows users to float "as disembodied spirits down endless corridors of an artificial Nirvana".⁶³

"The City of the Living Dead" thus strikingly illustrates philosopher Don Ihde's observation, made sixty years after the story was published, that technology sparks a double desire in the subject: "a wish for *total transparency*" of the technology, on the one hand, and the desire to have "the power, the transformation that the technology makes available", on the other. This double desire, Ihde states, is contradictory: "I want the transformation that the technology allows, but I want it in such a way that I am basically unaware of its presence. [...] The desire is the source of both utopian and dystopian dreams".⁶⁴ Manning and Pratt, it might be added, give their story an unambiguous dystopian twist by making the operation enabling these engineered dreams irreversible; once the subject is encapsulated in a silver coffin, she can never return to the real world.

The regressive potential of the engineered hallucination is brought to its logical conclusion in James Gunn's 1954 novella "Name Your Pleasure", where the simulated reality is the ultimate tool of an artificial intelligence that enforces a utilitarian hedonistic ideology centered on the dictum "Happiness is the only good", even at the expense of free will.⁶⁵ The means to secure happiness for everyone includes, among other things, automation and "entertainment: the perfection of the fictional life", in ever more advanced electronic media, culminating in "the final blending of illusion and reality".⁶⁶ The process culminates in the equivalent of pre-natal bliss which, as Huxley suggested, is the logical end of any technology aiming to cleanse human existence from pain and conflict. The sentient machine dictator's ultimate accomplishment is attained when it submerges men and women in womb-like bottles – an obvious loan from Huxley – and subjects them to the "long, slow, happy, fetal dreams"⁶⁷ before they expire and enter the final abolition of conflict, the "ultimate happiness".⁶⁸ The story ends in a utopian gesture affirming a puritan ethos, as the hero manages to re-program the computer to immerse *itself* into a similar state, leaving mankind free, like Huxley's savage, to choose its own destiny, including pain and conflict.

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2. The world behind the screen

Gunn's novella was published during the 1950's, a decade when the notion of artificial realities and engineered hallucinations acquired a new degree of topicality and urgency for a number of American sf writers, as society became increasingly saturated with images: from magazines, from advertising, from cinema, and – most fatefully – from television.⁶⁹ With regard to impact on social, economic and political life, nothing could match television, a "reality machine" of unprecedented potential for advertising and political propaganda, which started to enter American homes on a large scale in the early 1950's.⁷⁰ Television was branded as a threat by left-wing and liberal critics in terms partly anticipated by Forster, Manning and Pratt, and Huxley: it was morally debasing, destroyed familial and social ties, undermined literacy and encouraged intellectual as well as physical passivity.⁷¹ Children's viewing habits were (as they still are) a particular cause for concern. The Huxleyan association between electronic and chemical means of escape was recalled in the alleged addictive properties of the medium and the notion of the "TV junkie".⁷² The destabilisation or inversion of the ontological priority of reality over illusion could be observed in sitcoms such as *I Love Lucy*, in which characters carried the same name as their actors and were modeled on the socioeconomic profile of the intended target group, the white middle class.⁷³

But even with the introduction of colour television in 1953, the medium could not combat the sensory intensity of cinema, which met the challenge from television with techniques for more powerful, even immersive, illusions. Colour productions became the rule rather than the exception; wider screen formats and stereophonic sound were developed, as well as more curious attempts at delivering immersive experiences such as three-dimensional film, and the notorious Odorama.⁷⁴ But television is fundamental to the emergence of the contemporary sensibility of inhabiting an "infosphere", a world increasingly made up of mediated information, as witnessed by one critic, lamenting the demise of direct experience in terms reminiscent of Forster: "What we see. hear. touch. taste. smell. feel. and understand about the

experiences in terms of elements of a system that we see, hear, touch, taste, smell, feel, and understand about the world has been processed for us. Our experiences of the world can no longer be called direct, or primary. They are secondary, mediated experiences."⁷⁵ We are "living within artificial, reconstructed, arbitrary environments that are strictly the products of human conception, we have no way to be sure what is true and what is not. We have lost context and perspective."⁷⁶

Although such a generalised diagnosis of our culture takes its cue from television, the account accommodates every kind of representational technology, indeed every kind of man-made environment. Television is, at this stage in history, the single most important "reality machine", but in a wider, more abstract, and ultimately more insidious sense than 3D movies and the like. It purports to represent transparently an original reality, but television is rather a chief instrument in establishing what Jean Baudrillard labels the hyperreal, a self-referential system of signs and images produced by media and information technologies which takes precedence over older frameworks for our structuring and understanding of the real.⁷⁷ According to this apocalyptic and influential view, the uncritical audience tends to interpret reality in terms provided by television, rather than the other way round.

In American science fiction of the 1950's, the notion of television as a reality in its own right can be discerned in a number of texts, frequently extrapolated into more or less immersive, virtual environments. Ray Bradbury's short story "The Veldt" (1950) presents future domestic life as centered round a crystalline screen projecting images, the latest achievement of a culture obsessed with thrills and artificial sensations, where deep and meaningful human relations have deteriorated as a consequence.⁷⁸ The story combines a Huxleyan dystopian perspective with gothic horror, while also reflecting the nascent debate on television's effect on children. "The Veldt" tells of a suburban family, the Hadleys, whose automated house sees to their every need. The technological triumph of this house is the nursery, a room whose walls and ceiling project "telepathic emanations" as three-dimensional, immersive environments. "You sent out your thoughts. Whatever you thought would appear."⁷⁹ The children of the family project an African veldt, a sunscorched landscape of prowling lions and hovering buzzards, and in this environment they repeatedly enact a fantasy of lions devouring their parents. When the couple start worrying about their children's choice of artificial reality they plan to shut the nursery down. To prevent this from happening, the children lock them in the nursery, where they are promptly killed by the lions who have suddenly and inexplicably materialised in the flesh.

The psychological explanation of these murders is that the Hadleys have neglected their parental duties and emotional bonding under the corrupting influence of technological aides. The nursery, we learn, has been installed as a therapeutic tool in order to help rid the children of neuroses, which, we are led to understand, have developed from their parents' near-total permissiveness. The result is an utter lack of respect, and an inability to take no as an answer, culminating in the patricidal impulse. A psychiatrist explains that this room where they can enact their fantasies "is their mother and father, far more important in their lives than their real parents."⁸⁰

The deterioration of family ties through representational technology, a theme first struck by Forster, also leads to a total blurring of natural roles. The father observes: "They're spoiled and we're spoiled", referring to their consistently effortless existence. We recall the young couple in *Brave New World* metaphorically reduced to "twin embryos gently rocking together" by the *soma* and all the other technological trappings employed to protect the citizens from reality. The Hadleys are set on a similarly regressive course by the automated marvels of their home, "this house which clothed and fed and rocked them to sleep and played and sang and was good to them." The children are the logical result of this civilisation, morally deficient and wholly directed towards artificially provided sensory pleasure: "I don't want to do anything but look and listen and smell; what else *is* there to do?"⁸¹ Again, one is reminded of des Esseintes, engrossed in his own senses.

The African veldt, an environment ruled by harsh Darwinian laws and, significantly, closely associated with a pre-technological, "natural" phase in man's evolutionary history, forms an effective contrast to a society utterly out of touch with nature and with its own historical roots, strikingly similar to the hunting fantasy in "The City of the Living Dead". The irony of the story is, of course, that the artificial reality device, the crowning achievement of an excessively technological civilisation, is what allows nature and reality finally to return from its imposed exile, as the virtual lions actually kill. The fantastic eroding of the boundary between representation and reality is also the collapse of the boundary between technology and nature, and the text thus merges two extremely pervasive figures in the popular consciousness: the notion of "technology out of control" and the Freudian "return of the repressed". Hence, when the lions come out of the walls to devour the Hadleys, it is not only the betrayed children who take their revenge; it is denied nature putting on her most forbidding aspect as she usurps technology and reclaims her lost son, man.

The supernatural element brings "The Veldt" closer to gothic horror than dystopian fiction and sf, and diminishes its relevance as critique of electronic media. Bradbury, however, gives the issues raised by commercial television a more sustained treatment in his novel *Fahrenheit 451* (1953), an anti-capitalist dystopia in the Huxleyan tradition which specifically addresses the loss of literary culture in an age and a nation devoted to images and electronic media.

In his novel, books are banned as sources of dangerous ideas which threaten the conformist ideology of a consumerist society ("None of those books agree with each other"⁸²). The protagonist Montag is a fireman, a profession now re-assigned from the task of putting out fires to that of the burning of books. He gradually comes to recognise the spiritual emptiness of his life and society, and joins a clandestine network of former scholars and humanists evicted from the abolished universities and committed to rescuing as much as possible of the world's literary heritage by memorising

classics for future transcription.

The general public's need for leisure and entertainment is meanwhile fed with interactive soap operas, "parlor families", presented by three-dimensional television screens surrounding the viewer. Montag's wife, whose status as unhappy victim of this society is demonstrated by unconscious suicide attempts, spends most of her time in the television parlour, where she acts out a written part in the inane quarrels and conversations of a large family: "They mailed me my part this morning. I sent in some box-tops. They write the script with one part missing. [...] When it comes time for the missing lines, they all look at me out of the three walls and I say the lines."⁸³ Technically, then, the television show might be labelled interactive, but merely in the most meager sense of the word, as her part in the soap opera is confined to the pre-written script.

The virtual family, which delivers a simulacrum of community, is a safe and controllable surrogate for the real thing, which carries little weight in this society. If not completely weeded out, as in *Brave New World*, the arduous task of child-bearing is decidedly out of fashion. Montag's wife does not want children of her own, and another woman declares that no one "in his [sic!] right mind [...] would have children". Another woman opts for a Caesarian section, since there is "no use going through all that agony for a baby". The TV-induced perversion of familial ties already projected in "The Veldt" is briefly hinted upon, as one of the women describes how she avoids interacting with her children by confining them to the television parlour, which leads to a potentially violent alienation between parents and children:

*I plunk the children in school nine days out of ten. I put up with them when they come three days a month; it's not bad at all. You heave them into the "parlor" and turn the switch. It's like washing clothes: stuff laundry in and slam the lid. [...] They'd just as soon kick as kiss me. Thank God, I can kick back.*⁸⁴

The replacement of books by inane interactive, immersive television, and the refusal to endure the pain of childbirth are both metonymical of the basic flaw of the media-saturated society identified by Forster: a rejection of direct confrontation with reality as defined in terms of corporeality, biological and physical necessity and unmediated experience. By logical extension, we meet the few individuals who resist the ideology of comfort and artificiality in a context of nature and sensuality. A young girl who is later deported by the authorities as a possible risk to society says she likes to "smell things and look at things".⁸⁵ We recall the very same celebration of sensory experience in "The Veldt", where it was rather a sign of degeneration, since the source of impressions was artificial and not natural.

The ideological alliance of the unmediated experience of nature and body on the one hand, and literary culture on the other, is pursued throughout the novel as books take on living corporeality, both metaphorically and literally. Montag's mentor Faber, who introduces him to the underground society of literate men, savours the pure olfactory pleasure of tomes: "Do you know that books smell like nutmeg or some spice from a foreign land?"⁸⁶ Seated in a subway car and furtively trying to read St. Matthew, Montag's concentration is shattered by commercial messages. The frustration fills him with the desire "to feel his feet move, arms swing, lungs clench, unclench, feel his throat go raw with air".⁸⁷ We are reminded of the rebel Kuno's celebration of bodily experience in "The Machine Stops". At the climax of the novel, Montag is forced to flee into the wilderness after having killed the chief of the fire department; as he finally approaches a small band of book-memorisers, he savours the feel of his bruised and battered body as "a thing of brush and liquid eye, of fur and muzzle and hoof".⁸⁸ The theriomorphic imagery aligns the "natural" experience of one's body with the all but lost experience of reading books.

It is worth noting, however, that the novel briefly recognises that the medium of television *as such* need not be detrimental to spiritual depth and wholeness. Faber dampens Montag's initial bibliophilia by explaining that the value of any medium is determined by its content alone:

*It's not books you need, it's some of the things that once were in books. The same thing could be in "parlor families" today. The same infinite detail and awareness could be projected through the radios and televisions, but are not. No, no, it's not books at all you're looking for! Take it where you can find it, in old phonograph records, old motion pictures, and in old friends; look for it in nature and look for it in yourself. Books were only one type of receptacle where we stored a lot of things we were afraid we might forget. There is nothing magical in them at all.*⁸⁹

But literature has proven the prime medium for the representation of reality, by virtue of its truthfulness to life and richness in detail. Through a somewhat cryptic dermatological imagery, a lifelike, corporeal quality is bestowed to the medium itself:

*This book has pores. It has features. This book can go under the microscope. You'd find life under the glass, streaming past in infinite profusion. The more pores, the more truthfully recorded details of life per square inch you can get on a piece of paper, the more "literary" you are.*⁹⁰

The verisimilitude of printed literature, its allegiance to pre-technological modes of being and perceiving, is consummated by the roaming band of bibliophiles who identify themselves with the very books they have memorised: "I am Plato's *Republic*. Like to read Marcus Aurelius? Mr. Simmons is Marcus."⁹¹

It is precisely because they are so lifelike that books must be forbidden. Contemporary culture, Faber explains, is out of touch with life and reality. Three-dimensional television is instrumental in the pacifying of the citizens as it, like the feeling, supplies a reality of its own, overwhelming, irrefutable and impervious to intellectual distancing and analysis:

reality, supplies a reality of its own, overwhelming, ineluctable and impervious to intellectual distancing and analysis.

*The television is "real". It is immediate, it has dimension. It tells you what to think and blasts it in. It must be right. It seems so right. It rushes you on so quickly to its own conclusions that your mind hasn't time to protest, "What nonsense!" [...] You can shut [books], say, "Hold on a moment". You play God to it. But who has ever torn himself from the claw that encloses you when you drop a seed in a TV parlour? It grows you any shape it wishes! It is an environment as real as the world. It becomes and is the truth. Books can be beaten down with reason. But with all my knowledge and scepticism, I have never been able to argue with a one-hundred-piece symphony orchestra, full color, three dimensions, and being in and part of those incredible parlors.*⁹²

The lifelike qualities of (good) literature resulting from its richness of detail are thus further enhanced by their being allegorised into counterparts in a dialogue, if you will an interactive process, in which the reader is ultimately in control. Television, on the other hand, paralyzes the viewer's distancing and analytical faculties by the sheer sensory power of its output.

We also note how "life" is played off against "reality" in Faber's rhetoric. Literature acquires its "life" metaphorically, as an acknowledgement of its superior value, whereas television's "reality" is described in terms anticipating virtual reality: "It is immediate, it has dimension [...] It is an environment as real as the world", which you are "in and part of". Immediacy, spatiality, immersiveness – all primary attributes of physical reality. Faber's previous position, then, that it is the content that determines the value of any medium, would seem compromised by this consistent refutation of the TV medium, as representation is contrasted with simulation, life with reality, dialogue with passivity. Still, the descriptions of the medium reflect American commercial television in the 1950's, and not public service television, most obviously so when Faber alludes to televangelism and deplors the fact that even Christ has been reduced to "a regular peppermint [...], all sugar-crystal and saccharine when he isn't making veiled references to certain commercial products that every worshipper *absolutely* needs".⁹³

Electronic media of increasingly multisensory dimensions, then, are projected as instrumental in the destruction of literary culture and historical memory, and are held responsible for the commercialisation of every aspect of human existence. This development reaches its apocalyptic conclusion in the nuclear attack which concludes the novel, and leaves Faber and his band of book-memorisers with the opportunity to build a new world based on the humanistic values all but obliterated in the age of information.

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3. Recorded reality

While television in *Fahrenheit 451* is technically advanced and delivers a convincing illusion of reality, it is still a broadcast medium, and Faber's criticism, of course, can easily be extracted from its science-fiction context and seen as a slightly hyperbolic attack on the medium's status in the early 1950's. Other and lesser known sf narratives of the 1950's, however, lean more toward the more speculative tradition from Manning and Pratt and Huxley, and project television as a short-lived phase in the progression of ever more sophisticated technologies of mediated experience. Most of them share the pessimistic but not wholly unreasonable assumption that the more convincing and immersive the technology, the more escapist and degenerative will be its use.

An early but minor piece is John D. MacDonald's "Spectator Sport" (1950), a satire aimed at the entertainment industry which repeats the main points of Manning and Pratt's scenario and nods towards Huxley.⁹⁴ Civilisation comes to a halt when citizens put all their efforts into affording a permanent hookup to virtual-reality machines provided by a large corporation. The hapless hero, a time traveller from contemporary America, is recognised as a possible threat to the stability of society, promptly lobotomised and sent into seven years of cowboy adventures conveyed by electrical sensations and a three-dimensional video screen.

Arthur C. Clarke's moralistic satire "Patent Pending" (1954) introduces the idea, suggested in "The City of the Living Dead" and employed several times since, of recording a subject's entire sensory input on tape. The recording device is invented by a French scientist, only to be stolen by the unscrupulous assistant who sees that a fortune can be made from it. Clarke has the narrator recognise the revolutionary impact of such a device on the entire media industry by letting him end the story by admonishing his audience: "sell your TV sets before the bottom drops out of the market".⁹⁵ But, as also suggested in *Brave New World*, the prime market for such a device would be pornography. The disastrous effects on social bonds and responsibilities are signalled by the fate of the assistant himself, who becomes addicted to the recordings he produces for the black market, and is consequently shot by his jealous mistress.

The revolutionary and potentially disastrous technology of recorded sensory experience also figures in Hunt Collins' ambitious satire of media and advertising *Tomorrow and Tomorrow* (1956), which can also be seen as a response to *Fahrenheit 451*.⁹⁶ Bradbury's novel opposes artificial reality to literature by associating the latter with the vitalist celebration of direct, bodily experience, while Collins takes a more pragmatic stance, and attempts to overcome the time-honoured dichotomy between printed and visual media by seeing them as historically successive forms in the production of vicarious experience. This drastic union, which largely ignores other functions of fictions than mere escapism, is bolstered by an equally pragmatic ambition to negotiate a compromise between the resistance towards vicarious experience and its hedonistic misuse.

The story takes place in a near-future consumerist America again familiar from Huxley, although the satire is more distinctly aimed at advertising and the "thrill" industry. American society is divided into two groups fighting for political control: "the Vikes" (from "Vicarious"), with their power based in media, advertising and entertainment, and the puritanical "Reels" (from "Realist"), civil servants, workers and industrialists who are committed to "real experience", and resist all media entertainment except for literature and theatre, which are cleansed from any erotic content. By a somewhat crude bipolar logic, the Vikes' dependence on vicarious experience leads to a denial of "nature" and all that nature entails. Eating in public is strictly taboo, and, more importantly, so is physical lovemaking. Sexual needs are fulfilled solipsistically, through multisensory entertainment known as "sensos", which, like "feelies", delivers primarily pornographic entertainment. Consequently, the Vikes do not have children; the motif of childlessness is once again employed as an unambiguous marker of the spiritual sterility and alienation from life's true values which issue from an automated consumerist society.

As in *Brave New World*, thrill-seeking is both chemically and electronically facilitated, and central stimulants of every kind are legalised and used in excess by the Vikes. The chemical escapism is complemented by entertainment media, dominated by "Sensos". Unlike Bradbury, Collins makes no significant qualitative distinction between visual and literary fiction; the one follows naturally upon the other in the evolution of means for conveying vicarious experience. But we note how the novel singles out a specific format, the paperback, as a seminal vehicle for escapist entertainment, whereas culturally more prestigious formats such as the hardcover novel are left out of the picture. The embracing of artificial reality, a representative for the Vikes informs us, ultimately stems from the common man's sense of frustration, disempowerment and alienation in modern society, to which the paperback industry provides both a contrast and a remedy:

The little man was the slob, wallowing in filth, breeding kids he didn't want, dreaming of adventure he never had and never would have. The paperbacks took a hold then, and the little man began to wake up. He recognized convention for what it really was: a petty disguise of polite society, a subterfuge designed to keep the little man's feet firmly on the ground, to keep his head from out of the clouds.⁹⁷

Literature seems here to perform its time-honoured emancipatory task of alerting the reader to the truths of his life and of society, but in the next paragraph the paperbacks are mere instruments for the escapist impulse, teaming up with other image-producing agents of consumerist capitalism: "While the paperbacks extolled the merits of vicarious adventure, the advertising industry emphasized clothes, cosmetics, luxuries the little man could never afford, trips to Bermuda, beauty aids, automobiles, dreams."⁹⁸ (The identification of paperbacks as belonging to the entertainment industry emerges as a meta-medial irony – *Tomorrow and Tomorrow* was published by Pyramid Books, which only published paperbacks and, apart from sf, specialised in westerns, mystery novels and "juvenile delinquent novels".⁹⁹) The media industry, including publishing, develops ever more sophisticated technologies for vicarious experience, relying on sex to ensure their popular appeal, all of which leads to the same realisation that the people make in "The City of the Living Dead": "The make believe was better than the reality!"¹⁰⁰ Through the use of drugs and multisensory, immersive media, the common man "began to enjoy himself for the first time because now his entire world was a make-believe one. He conveniently disposed of the reality, which no longer served any concrete purpose in his life."¹⁰¹

The novel thus reiterates the moralist critique of artificial realities so familiar to us by now, but departs from the established pattern by subjecting this ideological position itself to critical scrutiny. Collins identifies the suspicion towards vicarious experience as of distinctly Puritan origin (going back to "the witch-craft trials"¹⁰²), and in a moment of soul-searching, a prominent Realist questions the mentality of censorship: assumptions of the kind that "books and movies were causing the widespread use of narcotics [and] that the delinquency bred and nurtured in our city schools was a result of the printed word". The Realists suffer from the double standard which is a common feature in liberal condemnations of puritan morals, particularly regarding things sexual; they picket films with sexual content while cheating on their spouses, rejecting stimulation from books and films while "[propagating] like rabbits". Ultimately, both the Vikes and the Reels are guilty of the same mistake, namely, the denial of reality: "We denied what was by refusing to permit representation of it, while secretly admitting it existed. The Vikes denied what was by allowing the representation to replace the reality."¹⁰³

Both sides are thus fundamentally flawed, and the novel suggests a more fruitful third position between them. The Realists seize political power; drugs are banned and the entertainment industry stifled. Deprived of both chemical and electronic escape routes, the protagonist, formerly a part of the entertainment industry, discovers that unmediated reality heals his fragmented existence and gives a new meaning to life. He takes long walks, watches children playing in the snow and discovers the mystery of love. However, representational technology need not be exiled from this renaissance of direct experience. Prior to the Realist takeover, a major breakthrough in the entertainment industry is developed by the Vikes, familiar from Clarke's "Patent Pending", a technique for recording a subject's entire input of sensory data. Collins' satire, however, suggests a more constructive route than Clarke, as the novel closes with the protagonist's decision to bring this new sensory technology to the president of the Realists, in the conviction that it "can be used for something good ... for real entertainment", and that it is possible to "strike a middle ground" between the puritan and the hedonist positions.¹⁰⁴

The tendency of the novel thus stops short of total condemnation of multisensory media, and holds a position close to the "content-over-medium"-argument which Bradbury briefly embraces in *Fahrenheit 451*. In that novel, however, there is ultimately an unbridgeable qualitative gap between the overwhelming passive experience of the television parlour, and the

dialogical experience of the printed word. The renaissance for culture, history and depth of experience beckoning at the end is wholly built on books. For Collins, the difference between literature and visual/sensory media is one of degree, not of kind. (The differences in representational modes between the written word and the image, between coded and iconical modes of representation, are never acknowledged as an issue.)

But the continuity between literature and other media emphasized in *Tomorrow and Tomorrow* is symptomatic of a decidedly non-romantic view of narrative fiction. The new sensory device will hopefully be used for "real entertainment" – a strangely lame phrasing, disappointing for the reader steeped in a romantic/modernist view, who would naturally expect to read "art", that representational activity which transcends the mere technical representation, and is renowned (among other things) for giving us a more profound understanding of the world and of ourselves, even as it helps us escape reality. But the concept of art is totally absent in *Tomorrow and Tomorrow*, and the notion of "entertainment", while straddling puritan and hedonist conceptions, is never contrasted with alternative ideas of the aim of the production of fictions. (One is tempted, of course, to see this stance as reflective of the writer's multimedial career, which ranges from crime fiction to screenplays, stageplays and television, but is firmly planted in the field of popular fiction.)

The relative abundance of dystopian fictions in the 1950's, which project mediated sensory experience as an "electronic womb", degenerative and detrimental to the individual and to civilisation, is reflective of the emergence of a commercial visual culture dominated by television. Since the 50's, audiovisual media and technologies of sensory representation and simulation have increased both in number and sophistication. These new technologies, together with recent advances in neurophysiology and – above all – the information revolution of the 1980's, set the stage for a reassertion and renegotiation of several of the themes and motifs set forth by Forster, Manning and Pratt, Clarke *et al* in sf narrative. While the themes of regression and addiction are still prevalent, in recent decades the notion of artificial or technologically mediated sensory experience has also been explored in more positive terms.

The 1983 film *Brainstorm*, directed by Douglas Trumbull, projects the notion of vicarious, immersive experience as primarily a communications technology, employing the idea of direct person-to-person transmission of sensory data.¹⁰⁵ The film aims at verisimilitude by being set in a contemporary Silicon Valley R&D environment, and by demonstrating a notably multi-faceted take on the notion of false or vicarious realities, where disastrous as well as constructive options remain open to the end.

The technology of recording the visual, auditory, olfactory and tactile sensations of a subject is initially launched as a revolution in communications technology rather than entertainment, and various peaceful applications such as travel, news and education are projected. These benign, civic-minded applications are compromised by the inevitable appearance of a pornographic tape, which the chief of the laboratory plays in an interminable loop, submerged in a state of perpetual sexual bliss. A possibly even more sinister use of the technology of brain-to-brain communication arises in the film when the military, unsurprisingly, takes over the project with the intent of developing such diverse applications as missile guidance systems and brainwashing techniques. This line of research is refined to the point where the recording of the subject's own unconscious psychic material is recorded and played back simultaneously as a nightmarish virtual reality. A young boy who is exposed to such a recording by mistake suffers a severe psychotic breakdown.

But the utopian aspects of the possibility of such a technology still dominate the film's ideological agenda, and it ends with an eschatological revelation. The danger of isolation, and not the least sexual isolation, explicitly or implicitly addressed in all the texts previously discussed, is directly rejected as Brace, the main character, saves his marriage by presenting his estranged wife with a recording of his fondest memories of their marriage, and gets repaid in kind by connecting to her brain while she plays a classical piece on the piano. "I never thought I could do this!" he exclaims euphorically as they are joined in the creative act. The possibility of direct inter-cerebral communication, whether in real time or through a recording, can be seen as a re-figuring of the idealist notion of human communication released from the compromises and approximations of language, and the dream of sharing one another's existence as one being.

The affinity between idealist thought and a technology enabling total, non-verbal participation and sharing of experiences is emphasized in the final sequence of the film, when the dramatic interest focuses on a tape recorded by a woman at the moment of her death. The tape is seized by the military before its contents are known. Brace manages to get hold of the tape and play it, and then experiences the woman's final journey beyond death. This journey forms the climax of the film, which ends on a religious note with a vaguely theosophic ring; after a dizzying cosmic journey one enters a luminous realm populated by butterfly-like entities, presumably the souls of departed men and women.

The engineering feat of dissolving the ultimate mystery of existence through advanced technology challenges liberal humanist assumptions of the ineffable nature of our innermost beings, while simultaneously confirming the Christian notion of an "immortal soul" in a neurophysiological-informational context. However, the film stops short of a definitive rendering of eschatological revelations as recordable data, since the tape runs out before the heavenly sphere is reached. Brace continues the journey "on his own", and witnesses the angelic abode without the benefit of the recording – the experience is no longer vicarious. This feat is left unexplained, and we have to surmise that his brain-patterns are already set on their astral course from his partaking of the dead woman's initial experiences after death; his own brain has reached a point of no return. The revelatory near-death experience also entails his physical near demise and, in the final moments of the film he is resuscitated by his wife's desperate pleadings. He comes back to life filled with spiritual reassurance: "We made it!"

Thus technology is finally deemed insufficient and/or unnecessary for the unveiling of the ultimate truths of existence, literally reaching its limit short of the transcendental revelation. This can be interpreted as an acknowledgement of the ineffable dimension of the human condition, and a confirmation of the humanist position. Then again, it is a magnetic recording of neurological impulses which enables the hero to embark on his ascent to the heavenly spheres, which indicates a post-humanist readiness to embrace even the profoundest spiritual events within the informational paradigm. We are faced with an ambiguity as to the true reach of technology, that is, the extent to which religious and scientific appraisals of the world are commensurable.

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4. The universes of simulation

Although set in Silicon Valley and produced during the incipient phase of the computer revolution, *Brainstorm* makes few references to computers. Digital technology, however, has broadened and complicated the issues involved, as it has demonstrated unprecedented powers as a tool for creating simulated worlds. This has been demonstrated in computer games, and, most spectacularly, in the technology known as virtual reality or VR, where the user dons electronic headgear and gloves, and becomes immersed in a digitally rendered three-dimensional environment, a virtual space where he or she is able to move about and manipulate objects.

Computer generated environments of this sort stress the distinction between representation and simulation, with important ideological repercussions.¹⁰⁶ Traditionally, simulation suggests counterfeit, pretense, etc., and can be applied to any of the fictional technologies discussed above, but after the rise of computer technology it is mainly understood as a model of a system, a coded construct generated from mathematical data. By virtue of being a written construct and not an analogous reproduction, recorded or otherwise, the simulation attains a phenomenal independence from any pre-existing reality. It is, as it were, a reality all its own, as malleable as its code is rewritable, a spatial and temporal event devised in, but independent of, ordinary space and time. The physically real is (among other things) that which is subject to manipulation, and even the simplest 3D structure of a CAD-program, such as a wire-frame cube, entice us with its seeming corporeality as we rotate it at our leisure. Physical reality is also that which surrounds us, and that through which we move. VR, too, exhibits these two other properties of reality by being immersive, enclosing the user from all spatial directions, and by offering the possibility of navigation.¹⁰⁷ But the "virtual" of VR signals the absence of material attributes (such as weight and mass) which are commonly associated with notions of the physically real. We interact with the VR environment according to the spatial parameters of the natural world, but its lack of tactile materiality informs us that it is mere "illusion".

Moreover, and, from the viewpoint of the liberal humanism articulated in the dystopian tradition, more importantly, the simulated realities of VR can be seen as emblematic of a feature which conventional media lacked, that is, agency – the ability to affect the course of events in the virtual world in accordance with one's own will and intentions.¹⁰⁸ These features make computer technology more or less immune to much of the criticism of the artificial experience which we saw developed in the dystopian tradition initiated by E. M. Forster, where the human subject is consistently posited as a passive consumer. These counterfeit worlds let the user look, listen, smell and feel, but not act. (In "The City of the Living Dead", which is the most technically detailed of the works discussed so far, we do not learn definitively whether the subject possesses agency in relation to the simulated environments or just experiences his subjective presence in them passively. The machine provides nervous impulses which convince the subject that he or she is "making the correct motions", but the adventure is pre-recorded and "always [ends] happily".¹⁰⁹)

During the early 1990's, virtual reality received an enormous amount of attention in the media, where it quickly merged with the concept of cyberspace. Even though the experience itself provided a crude, choppy and even nauseating artificial world, it was met with excitement and anxiety. The computer seemed to provide both "the instruments and the heavenly material" – hardware and software – necessary to fulfill Ficino's previously cited dream of man as divine creator and to fulfill the idealist dream of conquering imperfect reality. The millenarian enthusiasm among advocates of VR was evident from the obvious impatience with the limitations of the present state of the technology, and the pervasive conflation in cyberspace discourse of what had actually been achieved within the field with mere expectations. An influential MIT anthology published in 1991 is replete with utopian images formulated in the present tense. The editor hails VR as "a parallel universe" with "sights, sounds, presences never seen on the surface of the earth blossoming in a vast electronic night",¹¹⁰ and one critic indulges in a vision of the "cyberonaut" disengaged from the real world: "The cyberonaut seated before us, strapped into sensory input devices, appears to be, and is indeed, lost to this world. Suspended in computer space, the cyberonaut leaves the body and emerges in a world of digital sensation."¹¹¹ Another proponent describes it as "a habitat for the imagination", using oxymorons to evoke an almost apocalyptic atmosphere: "the place where conscious dreaming meets subconscious dreaming, a landscape of rational magic, of mystical reason, the locus and triumph of poetry over poverty, of 'it-can-be-so' over 'it-should-be-so'."¹¹²

These more or less idealist perceptions of the new technology reflect the assumption, rooted in seventeenth century rationalism, that all the significant aspects of what we call "reality", no matter how complex and elusive, are subject to mathematical formulation, and hence possible to reproduce or simulate in digital form.¹¹³ The computer revolution and the opening up of the cyberspace frontier is one of the key events in a set of radical transformations of all things human, and we are reported to be entering a "posthuman" condition, as an outdated humanist-liberal-romantic paradigm for defining human existence is replaced by a cybernetic-informational paradigm, according to which the world and

everything in it, ourselves included, are defined in terms of *information*. In our digital age, this frequently told story goes, a number of previously unquestioned basic conceptual distinctions are being erased by the informational paradigm: human – machine; simulation – reality; nature – artifice.¹¹⁴ The prospect of cyberspace as a full-fledged parallel world, free of the imperfections which mar our sublunary realm, is thus closely allied with, or even inseparable from, the prospect of the human body entering a symbiosis with the machine in a cyborg corporeality. Naturally, this kind of scenario also holds a special fascination for those eager to see *Homo sapiens* propelled into a more advanced evolutionary stage.

While this kind of high-tech metaphysics has thrived among researchers, in fringe academics and various pop culture formations over the last ten years or so, even some of those principally in favour of the new technologies have urged caution, in terms evocative of the dystopian tradition discussed above. "Even in the age of the technosocial subject", Allucquere Rosanne Stone reminds us, "life is lived through bodies", while Michael Heim urges us not to lose touch with "the body people who remain rooted in the energies of the earth".¹¹⁵ Cyberculture critic Erik Davis, drawing on Baudrillard, warns us that the onslaught of digital information deprives us of "the capacity to speak and act from within, and [that] communication is reduced to a reactive, almost technical operation. And so we drown, believing that to drown is to surf."¹¹⁶

Both the hopes and the fears surrounding virtual reality and related technologies have been articulated largely under the influence of a single work of fiction, William Gibson's science fiction novel *Neuromancer* (1984). The novel was quickly established as the pivotal literary document of a postmodern form of science fiction, labelled cyberpunk, which has reached a degree of critical acceptance denied earlier genre sf, as testified by Frederic Jameson's frequently quoted declaration of cyberpunk as "the supreme *literary* expression if not of postmodernism, then of late capitalism itself".¹¹⁷ Cyberpunk describes a world which is post-literate and media-saturated, and is consequently replete with references to rock music, film, fashion and the world of advertising. Its relevance has also consistently been defined in relation to other cultural products such as film (*Blade Runner*, *RoboCop*, *The Terminator*) and cultural criticism (Baudrillard, Donna Haraway, Arthur and Marie-Louise Kroker, etc.). *Neuromancer* has subsequently exerted a vast influence on popular expectations as to where post-industrial society is headed (most evidently so in the fact that the book, famously, gave currency to the term "cyberspace"), so much so that one critic feels compelled to open an essay on the history of cybernetics with the reminder that virtual reality "did not spring [...] full-blown from the mind of William Gibson."¹¹⁸

Neuromancer anticipates the Internet in terms evoking the technological sublime, as the global data network, called "the matrix" or "cyberspace", is accessed through a direct neural interface which renders it a wholly immersive, multisensory parallel reality, a luminous vista of otherworldly beauty where the world's data banks are structured in perfect geometries and vertiginous perspectives. The protagonist Case is a hacker or "console cowboy", and to him and to his brethren this immaterial vista represents a freedom and existential plenitude which ordinary reality cannot provide. At the outset of the convoluted narrative, he has been subjected to surgery that makes him unable to "jack in", which he experiences as an existential loss: "still he'd see the matrix in his sleep, bright lattices of logic unfolding across that colorless void. [...] the dreams came on in the Japanese night like livewire voodoo, and he'd cry for it, cry in his sleep, and wake alone in the dark, [...] trying to reach the console that wasn't there."¹¹⁹ Case's desire for "bright lattices of logic" evokes the erotic ascent described in *The Symposium*, according to which the world of the senses is continuous with the world of ideas through *eros*: the love of beauty progresses from carnal desire to ever higher objects, until it fastens itself to the idea of beauty itself.¹²⁰ Case's exile from cyberspace is further portrayed as a fall from grace in a gnostic sense, in a frequently quoted passage: "For Case, who'd lived in the bodiless exultation of cyberspace, it was the Fall. [...] The body was meat. Case fell into the prison of his own flesh."¹²¹ His first return is rendered in terms reminiscent of the gnostic notion of the return of the soul to *pleroma*, its true and boundless celestial abode:

*And flowed, flowered for him, fluid neon origami trick, the unfolding of his distanceless home, his country, transparent 3D chessboard extending to infinity. Inner eye opening to the stepped scarlet pyramid of the Eastern Seaboard Fission Authority burning beyond the green cubes of Mitsubishi Bank of America, and high and very far away he saw the spiral arms of military systems, forever beyond his reach.*¹²²

Such poetic passages read as confirmations of the utopian or even transcendental aspects of a computer simulated reality, and thus would have us locate the novel, and the VR technology it projects, well outside the dystopian humanistic tradition of Forster *et al* and in the realm of cyber-utopianism. But cyberpunk reflects the death of "grand narratives" by avoiding the socially well-rounded, ideologically self-aware and monolithic future societies of the modernist era, and instead stresses the de-centeredness, fragmentation and absence of unifying ideologies commonly associated with late capitalism. In *Neuromancer*, this is largely achieved through a narrative strategy which pointedly circumvents the didacticism common in earlier sf, and which in itself serves as a metaphor for the fragmentation of the world in which it is set. The reader is enticed into reconstructing the wider social and historical dynamics of this imagined future through bits and pieces of information, provided through asides, fragments of newscasts, etc. But the whole story of how this future happened is never told, and Gibson's consistent use of point of view also limits the perspective to that of his protagonists, self-serving individuals all of whom occupy marginal social positions. Hence, there is nothing to suggest that the transcendent meaning of cyberspace, no matter how acutely felt by Case and his fellow cowboys, is a socially widespread or politically significant phenomenon.

Form harbours ideology, and the refusal to present the imagined future in a unifying, inclusive perspective precludes any attempts to label *Neuromancer* as either dystopian or utopian, and goes a long way forward to explaining the radical "newness" of cyberpunk as a literary phenomenon. *Neuromancer* was regarded by some critics not as a "mere" novel, but rather as a conceptual map or key to the new cultural terrain of the post-industrial society. LSD-prophet-turned-Internet-prophet Timothy Leary, never hesitant to overstate the case, claimed that Gibson "had produced nothing less than the underlying myth, the core legend, of the next stage of human evolution".¹²³ Media theorist Douglas Kellner claims that Gibson forms a sort of social theory, continuing the critical tradition of Jean Baudrillard and "mapping our present from the vantage point of his imagined future", "charting the ways that new technologies are impacting on human life creating new individuals and new technological environments".¹²⁴ Film theorist Scott Bukatman attempts to convey the post-literary status of *Neuromancer* by referring to it as a cyberspace in its own right, a metafictional project aimed at bringing the "complexities of cybernetic culture to a kind of [...] sensible [...] cognitive experience". Its technical jargon and "absence of traditional pacing" makes the novel "best experienced as something other than narrative", and the non-literary method for reading *Neuromancer* is finally described metaphorically, in terms of the post-literate activity the novel's protagonist excels in: "The reader must jack into *Neuromancer* – it's a novel for would-be cyberspace cowboys."¹²⁵

While such statements seem to be obvious attempts to pry the novel away from the clutches of literary tradition, in fact *Neuromancer* continues the humanist tradition in more direct ways than most commentaries of the novel would have us believe, but, again, without the totalising claims of the older tradition.¹²⁶ In the passage where Case conceives the matrix as "his distanceless home", there is nothing to suggest that his excitement is not genuine, but it is rendered ironic by the presence of the vast economic power structures which define and uphold cyberspace. The cube and the pyramid, ideal geometries constructed on an immaterial plane, are here appropriated and turned into logotypes by corporate and governmental interests. (A steel combine is represented by pink spheres.¹²⁷) The astronomical representation adopted by the military also has an idealist significance, as celestial phenomena traditionally are invested with transcendent symbolism. The "distanceless home" may be superficially presented as a digital *pleroma*, but it is closer to the realm of the demiurge.¹²⁸

The idealist potentials of cyberspace thus seem both affirmed and compromised in Gibson's vision, but the information technologies are portrayed as less ambivalent instruments of disempowering the individual in the representational medium called simstim (*simulated stimuli*), a technology for recording/transmitting sensory data of the kind suggested by Manning and Pratt, and elaborated by Clarke and in *Brainstorm*. Despite its name, simstim is not a technology of simulation, but rather one of representation, which places the user in a wholly passive receptive role. In the self-consciously pseudo-idealist ethos of the console cowboys, simstim is contrasted to cyberspace's parallel universe and, in spite of the close technical correlations, dismissed as a medium appealing to base sensuality, in much the same way as Huxley's feelies:

*Cowboys didn't get into simstim [...] because it was basically a meat toy. He knew that the trodes [= electrodes] he used and the little plastic tiara dangling from a simstim deck were basically the same, and that the cyberspace matrix was actually a drastic simplification of the human sensorium, at least in terms of presentation, but simstim itself struck him as a gratuitous multiplication of flesh input.*¹²⁹

Case's disdainful attitude is articulated from an outsider position characterised by personal autonomy, signalled already by the mythical associations of the designation "cowboy". Simstim's dominating application is commercial, the basis for a huge media industry where its role is anything but emancipatory. This is elaborated in the second installment of the Cyberspace trilogy, *Count Zero* (1986), in which a lower middle-class woman's addiction to simstim soap operas, with titles such as "People of Importance" and "Atlanta", is described from the viewpoint of her neglected, teenaged son:

*He knew her, yeah, how she'd come through the door with a wrapped bottle under her arm, not even take her coat off, just go straight over and jack into the Hitachi, soap her brains out good for six solid hours. Her eyes would unfocus, and sometimes, if it was a really good episode, she'd drool a little. [...] She'd always been like that, as long as he could remember, gradually sliding deeper into her half-dozen synthetic lives, sequential simstim fantasies Bobby had had to hear about all his life.*¹³⁰

The situation reproduces Forster's dystopian scenario in "The Machine Stops": the loss of bodily dignity, and the deterioration of parental relationships are portrayed as consequences of technologies of mediated experience. Of course, Gibson's bleak portrayal of disempowered lower middle-class existence in the information-saturated near future takes its departure from the well-known "parallel life"-syndrome familiar from daytime television. Gibson's simstim thus emerges as a means for controlling the masses, but its consumers are even further removed from the arenas of political influence than are soap opera addicts, and confined to a full-fledged alternate existence. But whereas Kuno, in "The Machine Stops", seeks validation and freedom in nature, in his body and in history, the boy in the previous quote seeks it by becoming a console cowboy and mastering the matrix. Technology has, indeed, become second nature.

Soaring through the matrix in "bodiless exultation", and wasting one's life in vicariously experienced glamorous identities seem to be two activities located at the polar ends of the utopian-dystopian spectrum inferable from IT. But humanist scepticism towards artificial experience also informs the way Gibson contextualises cyberspace existence. The disembodied sensorium degrades the body, and reduces the richness of social interaction which presupposes the corporeal. The drooling woman engulfed in simstims, oblivious to the world, is not a less disparaging image than the one of Case, the outlaw cowboy hacker, using a catheter for longer sessions in cyberspace. During the complicated finale,

Case is hooked up to the female protagonist Molly's sensory input by simstim. He sees through her eyes, and suddenly finds himself staring at himself jacked into the computer: "a white-faced, wasted figure, afloat in a loose fetal crouch, a cyberspace deck between its thighs, a band of silver trodes above closed, shadowed eyes. The man's cheeks were hollowed with a day's growth of dark beard, his face slick with sweat."¹³¹ The white complexion and "fetal crouch" is suggestive of the notion of the "electronic womb", and connects to the embryonic theme initiated by Forster and elaborated by Huxley, Bradbury and Gunn. Bobby, the boy abandoned by his simstim-addicted mother in *Count Zero*, resurfaces in the trilogy's final installment *Mona Lisa Overdrive* (1988) in even worse physical shape than Case: perpetually submerged in a virtual reality, reeking of urine and hooked up to a life-support system.¹³²

Bodily neglect is rationalised in the contempt console cowboys feel for "meat". Case re-enacts des Esseintes' disdain of physical movement in the terse observation that "travel was a meat thing",¹³³ and is instinctively provoked by "the Zionites", a band of Rastafarians who are suspicious of cyberspace and whose pre-informational social code acknowledges the body: "The Zionites always touched you when they were talking, hands on your shoulder. [Case] didn't like that."¹³⁴ And just as bodily contact repels Case, so does artificial experience repel the Rastafarians. Case invites Aerol, one of the Zionites, to jack into cyberspace. The judgment is as terse as it is telling: "'What did you see, man?' [Case asked.] 'Babylon,' Aerol said, sadly".¹³⁵ From the perspective of the Zionites, the pseudo-Platonic conception of cyberspace as a realm of spiritual emancipation is compromised by the humanist view, familiar from Forster, of disembodied interaction as an unnatural and morally dubious human state.¹³⁶

The novel's fundamental ambiguity is manifested in the final pages and the literal splitting of the protagonist in two versions, one still bound by "meat", one downloaded in the matrix. It turns out that Case and his cohorts have been used as instruments by an artificial intelligence, with the object of merging itself with the matrix into an omniscient, God-like consciousness – a classic sf theme. When this new entity appears on a television screen to explain the new state of affairs, Case smashes the screen and exclaims, "I don't need you!".¹³⁷ The Luddite gesture, affirming human autonomy and dignity in the face of omnipotent technology, is contrasted by the following scene, the last one in the novel, in which we learn that a "virtual" Case, a digital version of him, dwells in the matrix together with a long-lost girlfriend, immortal, in a state of innocence and peace denied him in his fallen "meat" existence. Technology never fails to betray us, and never ceases to beckon with its promise to plant the Garden here, on earth, in the midst of human history.

Neuromancer's integration of a number of established dystopian elements in a text which ultimately denies us a dystopian reading, can be seen as part of a narrative bricolage-technique so typical of postmodernism, a borrowing or "recycling" of motifs from previous cultural products, including not only sf but also mainstream literature and rock music.¹³⁸ But an intertextual approach to the work does not preclude a reading of it as "realistic", that is, as an attempt to portray the information revolution as lived reality, a condition in which people go about their business without necessarily taking on the role of either victims or Luddite rebels, or in which they do a little bit of both.¹³⁹ Read as such, the references to Forster and Huxley rather testify to the continued significance of the tradition inaugurated by them. This is not the place to evaluate these texts in terms of prophetic precision, or compare them to what we now know of some of the human effects of information technologies, but living in an age when more and more time is spent communicating through machines and staring at electronic screens, we would have to be severely limited in our imagination not to appreciate the unsettling relevance of these visions.

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About the Author

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Notes

1. This article is part of a forthcoming larger study within the research project "IT, Narrative Fiction, and the Literary System", financed by the Johnson Foundation and run by The Section for the Sociology of Literature at Uppsala University with professor Johan Svedjedal as project leader. (<http://www.littvet.uu.se/lsoic/itlit>) The text was edited by Sharon Rider. [Return to the text]

2. The absence of any reference to Philip K. Dick in the following pages might seem to constitute grave scholarly negligence, counterfeit realities being one of the most persistent themes in Dick's highly influential and widely discussed oeuvre. The main reason for the omission is that the dystopian themes connecting Huysmans to Gibson is more or less absent in Dick's work, and the motif of counterfeit reality is primarily used as a vehicle for a highly idiosyncratic exploration of certain religious and metaphysical issues. I will, however, treat Dick in a separate article. [Return to the text]

3. Boccaccio *Decameron* trans. John Payne, rev. and ed. Charles S. Singleton, Berkeley and Los Angeles, 1982, vol. 2, p. 459. [Return to the

3. *Deception, Deceitfulness*, trans. John Payne, rev. and ed. Charles S. Singleton. Berkeley and Los Angeles, 1992, vol. 2, p. 400. [Return to the text]

4. From *Platonic Theology (Theologica Platonica, 1482)*, trans. Josephine L. Burroughs, quoted in Paul Oskar Kristeller, Ficino and Pomponazzi on the Place of Man in the Universe. *Journal of the History of Ideas*, vol. 5 (April), 1944, p. 233. [Return to the text]

5. See Oscar G. Brockett, *History of the Theatre*. 5th ed. Boston, London, etc., 1987, pp. 163-172; 176 ff. [Return to the text]

6. A. M. Nagler, *A Source Book in Theatrical History*. New York, 1959 [1952], p. 71. [Return to the text]

7. *ib.*, p. 72. [Return to the text]

8. Stephen Orgel, *The Illusion of Power: Political Theatre in the English Renaissance*. Berkeley, Los Angeles, London, 1975, p. 55. [Return to the text]

9. *ib.*, p. 58. [Return to the text]

10. Kristeller 1944, p. 235, quoted in Orgel 1975, p. 58. [Return to the text]

11. Michael Benedikt, ed., *Cyberspace: First Steps*. Cambridge, Mass. and London, 1993 [1991], p. 1. [Return to the text]

12. See below, p. 273 f. [Return to the text]

13. Cf. Erik Davis, *Techgnosis: Myth, Magic + Mysticism in the Age of Information*. New York, 1998, pp. 33 ff. [Return to the text]

14. See Orgel 1975, pp. 16 f. [Return to the text]

15. "Expostulation with Inigo Jones" (1631), quoted in Nagler 1959, p. 155. [Return to the text]

16. See, for example, Sheldon Cheney, *The Theatre: Three Thousand Years of Drama, Acting and Stagecraft*, rev. ed. London, 1972 [1963], pp. 203 f. [Return to the text]

17. See Daniel Pick, *Faces of Degeneration: A European Disorder, c. 1848 - c. 1918*. Cambridge, 1989, *passim*. [Return to the text]

18. J. K. Huysmans, *Against Nature*, trans. Margaret Mauldon. Oxford and New York, 1968, p. 18. [Return to the text]

19. For a history of these techniques, see Stephan Ostertam, *The Panorama: History of a Mass Medium*. New York, 1997 [1985], *passim*. [Return to the text]

20. Cf. *ib.*, pp. 177 ff. [Return to the text]

21. Huysmans 1968, pp. 18 f. [Return to the text]

22. *ib.*, pp. 100 f. [Return to the text]

23. Kristeller 1944, p. 233. [Return to the text]

24. William Burroughs, *The Naked Lunch*. London, 1956 [1955], p. 33. On Burroughs' relation to cybernetics, see Katherine N. Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*. Chicago and London, 1999, pp. 208-221. [Return to the text]

25. *ib.*, pp. 201. [Return to the text]

26. The term was first introduced in English in *Science Fiction* 202 (1971-1980). [Return to the text]

27. On the relation between the theatrical and the cinematic, see *Science Fiction* 202 (1971-1980). [Return to the text]

28. See H. M. Schlegel, *Science, Technology and Society in Shakespeare's Day*. New York and London, 1971 [1965], pp. 80-72. [Return to the text]

29. *The Machine Question: Historical Perspectives on the Debate on the Mechanism of Man*, ed. by David G. Foray, pp. 10-11. [Return to the text]

30. See *Science Fiction* 202 (1971-1980). [Return to the text]

31. Cf. *ib.*, pp. 10-11. [Return to the text]

32. Cf. *ib.*, pp. 10-11. [Return to the text]

33. Cf. *ib.*, pp. 10-11. [Return to the text]

34. Cf. *ib.*, pp. 10-11. [Return to the text]

35. Cf. *ib.*, pp. 10-11. [Return to the text]

36. Cf. *ib.*, pp. 10-11. [Return to the text]

37. Cf. *ib.*, pp. 10-11. [Return to the text]

38. Cf. *ib.*, pp. 10-11. [Return to the text]

39. Cf. *ib.*, pp. 10-11. [Return to the text]

40. Cf. *ib.*, pp. 10-11. [Return to the text]

41. Cf. *ib.*, pp. 10-11. [Return to the text]

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43. Cf. *ib.*, pp. 10-11. [Return to the text]

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100. Cf. *ib.*, pp. 10-11. [Return to the text]

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ISSN (tryckt version) 1402-1501
ISSN (elektronisk version) 1402-150X

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E-mail. human.it@hb.se
ISSN (print) 1402-1501
ISSN (elektronisk) 1402-150X

Senast uppdaterad: 2002-10-29
Helena Francke