Introduction

In the following paper I will be discussing notions in literature and movies which focus on the future of mankind and the effects they have on our reality. As we enter further into the 21st century, the speed with which technology (especially communication technology) increasingly shapes the way we live and the way we perceive the world is accelerating. In the last few decades the shift from the industrial age towards the age of information has frequently served as the central and predominant subject for many SF novels and movies.

How will new technologies change human beings? Will humans become a part of the machine (a great fear often expressed in SF)? And which effects will these transformations have on mind and body?

In the first four chapters I will deal with different forms of posthuman representations in popular culture while the in last I will shortly reflect on the ideas behind the transhumanist movements. Virtual reality, the cyborg, David Cronenberg and the mutants in the Marvel Universe offer many different perspectives on posthuman appearances and beings. The transhumanists believe we can achieve a posthuman state of being, which will be necessary for the survival of mankind.

In the conclusion I will undertake answering the question if we are on the verge of becoming posthuman and why a critical posthumanism is necessary.

I have added an appendix to present certain images of SF-movies and comics, and the influence they exerted on each other.

1.The last man on Earth or how we became posthuman?

> At the beginning of the 21st century, the human race has definitely entered a new phase in the evolution, a phase which in contemporary thought is repeatedly referred to as the "posthuman condition" (Rossini 2003).

What is this condition mentioned in the title and what do we mean by posthuman? If we delve on the word as such it becomes quite obvious: *post* in this context is meant as temporary, in other words meaning "after-humanism". But is this really the basic idea? Essentially, posthumanism is rooted in philosophical scepticism claiming uncertainty in knowing the subject in contrast to the ideas of Kant and Hegel concerning acquiring knowledge through experience and reason leading up to an understanding of the subject, which in turn is grounded in the teachings of Descartes. The subject, though, has not become obsolete, but is rather decentred by postmodern and poststructuralist philosophers. The concepts of postmodern and postmodernity are difficult to define. Basically they are "a cultural and ideological configuration said to have replaced or to be replacing modernity and modernism" (Jary&Jary 1991: 487). Postmodernist theorists as well as very influential thinkers such as Derrida took a critical standpoint of our western way of thinking and the dualisms evolving from this, and vice versa. "Distrust of technology and questioning of positivist Enlightenment philosophy, such as the inevitability of progress, is characteristic of postmodern thought" (Clark 1998: 6). Moreover, the idea of the subject was attacked, which excluded the 'other' because of being different. "Postmodernity is marked by the return of the 'others' of modernity: woman, the sexual Other of man, the ethnic or native Other of the Eurocentric subject and the natural or earth Other of techno-culture emerge as counter-subjectivities" (Braidotti 2002: 117).

Postmodernity and the times we live in are defined through exchanges, so-called flows, that are cultural, technological, financial, products and people (Appadurai 1996). Transnational companies and financial markets have replaced the nation and weakened the power of national government and the state. Production has shifted from the Fordist model of a rationalized, organized labour force towards a policy of "flexible accumulation", by which companies have downsized the total size of their core workforce, relying more on sub-contractors and outsourcing in order to maximize profits and thus accelerate turn-over speed. In addition, we are experiencing as a result of these processes a rapid and expanding globalization which, together with

modern communication technology, is generating a time-space compression of the world with increased attention being placed on 'the direct and the instant' in postmodern lifestyles (Harvey 1989).

Posthumanism is linked closely to postmodernism: "a time in which 'humans' are no longer the most important things in the universe" (Gane 2006: 432), and "is characterized by its opposition to humanism" (Ritzer 2007: 3548). It is used to interpret different aspects of social life and human interaction: philosophical, cultural and the state of condition man is in. On the one hand, one can observe the development in which logocentrism is being displaced from modern thought, in which in the meantime animals and man are perceived as equal, which also has had an influence on the animal rights movements and their ideas. On the technological side posthumanism lays the ideological groundwork leading up to the appearance of science-fiction thought and literature after cybernetic research became firmly established. "By the late twentieth century, our time, a mythic time, we are all chimeras, theorized and fabricated hybrids of machine and organism; in short, we are cyborgs" (Haraway 1980: 150).

But there are also many negative views on the matter. Francis Fukuyama has published in the last two decades several nightmare visions of the fate of humans through the usage of biotechnology and genetics. Fukuyama represents the tradition of liberal humanism based on Kantian thought of human nature and its origins and believes it to be threatened by these technological developments. Fukuyama argues that the state and governments have to keep an eye on this matter and pass regulations to maintain the uniqueness of humanity. The computer also threatens man's position in our world as Time Magazine declared a computer to be "Machine of the Year" as the replacement for "Man of the Year" in 1982, since there were no appropriate human candidates (Badmington 2003: 12). But Fukuyama's view lacks historicity since the human nature and humanism he refers to, and which he considers to have a universal legitimation, are exactly the points anti-humanistic theory tried to demystify (Herbrechter 2009: 144).

Inspired by SF novels the transhumanist movement believes in a posthuman vision of the world and the possibilities to achieve this aim through technology, a position attacked by Fukuyama as mentioned above, who believes that the modification of any key characteristics will lead to a chain of changes with

unpredictable outcome (Fukuyama 2004: 43). Oliver Krüger mentions the reason why many transhumanists believe in this is the apparent necessity to overcome the physical body and boundaries because of the future death of our planet, the end of the world (2004: 255). Many futurists believe the survival of mankind depends on colonizing the galaxy. One of the most prominent groups are the *Extropians*, with one of their main influential thinkers Max More believing in the possibility of human immortality through the use of cryogenic technology, that is cryopreserving the human body until the day technology is invented to make this vision possible. The introduction to the virtual worlds of the internet fused many new ideas amongst the Extropians and other transhumanists. "The Extropians and the Children of Mind were revelling in their new found status as unlikely seers of an uploaded future, a stark or glorious future [...] in which human beings left behind the 'meat' and uploaded their brains to live in the miasmus of the Net" (Cooke 2006: 20). This idea is widely represented in the cyberpunk genre, which I will refer to more closely at in the following chapter.

"'Posthuman' tends to designate a perceived change in the nature of the human brought about by developments in the fields of cybernetics, neuroscience and genetics and their resultant technologies since the Second World War" (Wallace 2005: 26). Wallace provides us further with a list of these technologies including a wide range from computer and communication technologies to the medical technologies enhancing human bodies and altering abilities (2005: 26).

Since there are two main approaches to posthumanism, one which embraces the possibilities of change and one that tries to repress these developments in whichever way possible, I will therefore delve more closely on both versions of posthuman texts. Donna Haraway stresses the importance of the concept of 'joint kinship' between the human and technology, which in other words means the awareness for the material reality, that is which defines and shapes us and our worldly environment to overcome hierarchical structures. Haraway writes that technology and humans are closely intertwined and therefore cannot be separated. She undertakes to point out how power structures continue to remain through hybridization or cyborgization; and if we take a closer look at a variety of issues, like gender and reproduction, we see how the cyborg can actually shake the pillars of Western thought and have a liberating effect. "The dichotomies between mind and body, animal and human, organism and machine, public and private, nature and culture, men and

women, primitive and civilized are all in question ideologically" (Haraway 1980: 160). Once we realize that our existence is not free from exterior factors without any transcending factors we can then start a critical analysis of what it means to be 'human'.

Western thought has a long tradition of perceiving the mind as being independent of the body, as in Christian faith and as mentioned earlier with the Cartesian dualism. The mind is placed hierarchically above the body and, therefore, there is a hierarchy also amongst our body parts, giving a higher value to the head[1]. Holistic views of human nature contradict this notion and precede Donna Haraway's focus on the material reality. The criticism of posthumanism is not the transformation of human kind, but the invention of the concept "human" and the oppressing elements brought about by this idea. "The task of posthumanism is to discover those uncanny moments at which things start to drift, of reading humanism *in a certain way,* against itself and the grain" (Badmington 2003: 19). And as he further writes, in the way Lyotard used the prefix *post* in another sense than temporal (Lyotard 1990: 45), we must understand the *post* in posthumanism accordingly. The *post* is the beginning.

Early examples of posthumanist literature are Mary Shelley's *Frankenstein* and Gustav Meyrink's *Golem.* The fate of the human being has always caused worries for many writers of horror and SF literature. Apocalyptic scenarios raise fear about the loss of control of human over their inventions in the area of technology, which will lead to the demise of humans (as can be seen in dystopian movies like *Matrix*, *Terminator* and Stephen King's eighties SF-horror-crossover *Rhea M*[2]). But this is only one aspect of many.

Other writers have dealt with the transformation of human through the usage of technology: here the concept of the cyborg comes into play, as being not hundred percent human nor hundred percent machine, but is placed on the border between the two and transgresses the concept of human. In most SF stories the cyborg is a dangerous and destructive force. The cyborg is a hybrid creature, which "threatens a community of authentic human subjects: capable of masquerading as non-android, it blends with mainstream society, infringing upon the boundaries of the human

[1] Extropians, for example, offer a preservation of the head, if someone can't afford to deep-freeze the whole body. *Futurama* (1999) mocked this idea, showing several celebrities, living only as heads in tubes.

[2] Based on a Stephen King short story, machines and electronic gadgets are animated after a comet passes Earth and start attacking humans and killing them.

collective" (Galavan 1997: 413).

Further on I will undertake a closer look at positive ideas connected to the cyborg and the self-reflexive liberating potential for humans which it contains. Humans have changed through the course of history and we will continue to change in future and in effect more radically through the use of technology in our everyday life. This fact is unpreventable. The development of tools has altered our abilities to interact with our environment and to "perfect" the surroundings we live in to our own advantage. The cyborg might probably be the next phase of human evolution. Once we come to recognize that the process of cyborgization is already happening and that we are all hybrid beings, can we focus on future challenges and how we are to handle these developments.

2.Simulated Worlds

I.Cyberspace

> "Cyberspace. A consensual hallucination experienced daily by billions of legitimate operators, in every nation, by children being taught mathematical concepts....A graphic representation of data abstracted from the banks of every computer in the human system. Unthinkable complexity. Lines of light ranged in the nonspace of the mind, clusters and constellations of data. Like city lights, receding" (Gibson 1984: 51).

Long before the internet became an integral part of our everyday life in the first world countries, several scholars, such as Marshall McLuhan and SF-authors like William Gibson and Bruce Sterling, thought about the possibilities and changes society will undergo with the introduction of new communication technology. The term cyberspace is associated very closely with the latter two authors. Gibson envisioned, with his personal view on cyberspace, a world made up of geometrical forms, lights and the representation of oneself in a digital form does not resemble necessary the physical body. Probably Gibson's work was the most influential vision of cyberspace, by which many latter novels of the genre were inspired in the depiction of the VR[3]. Gibson's imagination of cyberspace also had "a considerable effect on the development of three-dimensional virtual reality imagining software" (Hayles 1999: 21).

Cyberspace also has many different names which we use for its description; 'matrix' and 'grid' (reintroduced early this year with the reboot of *Tron*) are further examples. In most novels and movies cyberspace is mostly linked to hackers and their illegal activities; and cybernetics in general with the military, changing human beings into weaponry.

In the meantime, the cyberspace known as internet has become part and parcel of our everyday life in both positive and negative ways. On the one hand, communication, cultural and economic exchange for the benefit of mankind (or an elite class) has increased through the time-space compression (Harvey 1989) experienced by the use of the internet. On the other hand, governments are trying out new methods of surveillance and the military is discovering a new terrain for war.

[3] I will use the short form of Virtual Reality 'VR' during the text

"Cyber-war" is an increasingly repeated noun in contemporary news implying that hackers and their activities are to be considered "first strikes", which means terrorist acts, and consequently combated by special IT units of the military. Because hacker activities are viewed today as more or less criminal acts and insolent acts of defiance (with groups like LulzSec going as far as to mock their "victims") the military is attempting to take control of the cyberspace under the apparent threat of cyber-terrorism by these groups, as seen in the case of wikileaks (Lobo 6/2011). The government of Great Britain even goes as far as to maintain that cyber-terrorism will become the greatest threat to governments in contemporary times, thus resulting in the government spending 650 million pounds in the development of anti-hacker-technologies and task forces (Harvey 5/2011).

Cyberspace is often depicted in the movies as totalitarian technology, enslaving the people. Probably the only movie touching on the question on how cyberspace can be used to adjust, enhance and improve our personality is *Lawnmower Man* (Krüger 2004: 222), based on a short story by Stephen King. The protagonist transforms from a simple minded gardener into a highly intelligent human being through the mind-enhancing experiences in cyberspace. Braidotti interprets *Lawnmower Man* as reconstructing masculinity by depicting the evolution from idiot to little boy to adolescent to cowboy to losing virginity to macho to psycho and finally to serial killer in the end. At one point the subject believes he can see God and wants to share his experience with his girlfriend making her reach the ultimate orgasm, which is followed by the cybersex (or psychic rape) scene in which she is literally blown apart and goes insane (2002: 251). "This becomes almost a manifesto for evolutionary psychology" (Braidotti 2002: 251). That is an issue which we might not consider positive.

There are parallels at points in the depiction of the VR and the fluid body appearance of the people roaming the cyberspace with surrealist imagery as well as with Timothy Leary's descriptions of his experiments in the sixties in California[4] with psychedelic mind-enhancing drugs aiming to perfect the human mind, especially the

[4] During the Flower-Power era of the sixties and seventies, the use of psychedelic drugs had been very popular. Leary had close contacts with the Flower Power-movement and was experimenting with LSD. The people who he worked together with gave detailed information of their feelings and experiences during their drug trips.

melting together of two people during the cybersex-scene. “1960’s LSD guru espoused a utopian transcendent vision for this technology, hyping it indirectly as electronic acid. At a 1991 appearance in Chicago, Leary proselytized for VR as “a legal method to achieve expanded awareness”” (Dinello 2005: 151). Leary was originally a psychologist, who later spent much of his time working on the idea of how to perfect the human being. In addition, he was also a futurist with his *SMI²LE-Project*[5] with its three main themes: infinite life, space migration and intelligence enhancement (a point very common amongst transhumanist thinkers).

Life in VR, mind without body: is it possible? Hans Moravec is one of the pioneers to believe in the possibility of uploading human consciousness into a computer and *leaving* the body behind. He presented his ideas in *Mind Children: The Future of Robot and Human Intelligence*, which become one of the central points of criticism and the opening words by Hayles in *How we became Posthuman* (1999: 1). The meat/flesh (body) is viewed as a prison of the mind, which we will be able to neglect in future, since after the Cartesian view the mind and body are entirely separated. But the projected obsolescence of the body also implies the loss of biological matter, normally viewed as the immovable material upon which gender differences are constructed and inscribe male privileges, because the dislocation of the body creates anxieties reducing the complexity of the mind to the brain and defining this brain as male or female (Chilcoat 2004: 156), a notion criticized by many female writers and scholars. Cyberpunk builds most of its stories around the idea of the mind/body separation. But what are we then to make of the bodily experience which influences our view of the world and our perception of what is real?

II.Cyberpunk

Cyberpunk is “a genre best known for its rejection of embodiment and embrace of an existence in cyberspace” (Vint 2007: 102). The main protagonists are “consol cowboys” (Fernbach 2000: 234) and hackers who spend most of their life in ´VR´, street samurais, criminals and corporate agents. Further characteristic features are bodily modifications, transnational corporations replacing the governments and an overall pessimistic dystopian tone.

The eighties were the decade, in which many of the most influential

[5] http://www.smi2le.org/cms/

cyberpunk novels were written, long before we entered cyber-culture. Bruce Sterling, with *Schismatrix,* and William Gibson, with *Neuromancer,* are the most prominent authors who created this specific genre.

Visually, the worlds imagined and their cyber-city aesthetics go back to movies like Fritz Lang's *Metropolis* and also Jean "Moebius" Giraud, who was heavily influenced by the movie Metropolis and who was later to become one of the best-known comic artists with his extraordinary imaginary of future cities (e.g. set-design of *The 5th Element*[6]) and working for SF comic magazine *Heavy Metal*. Bukatman also mentions Angus McKie, with his high-tech science fiction illustrations which have had a great formative impact on cyberpunk design (1993: 133). (See appendix Fig.II.4.1, Fig.II.4.2, Fig.II.4.3 and Fig.II.4.4 P.67-68 for comparison between cyberpunk city designs). Elaine L. Graham writes that the genre of cyberpunk emerging in the 1980's directly originates from Fritz Lang's vision of the future with its urban wastelands and its division between the wealthy class, free from physical imperfection and death through the use of technology, and the underclass (2008: 193).

Cyberpunk is often very dystopian, placing the stories in a near future from now where nation-states have often been abolished and which in the meantime are controlled by transnational mega-corporations; but in comparison to dystopian novels, there is no criticism or collective solution to the situations described. Dystopian novels aim normally at a critique of certain developments detrimental to society. The cyberpunk protagonists are mostly concerned with the struggle of survival in the urban jungle surroundings or in the world of cyberspace. Graham writes that "the physical environment is either that of urban decay and social disintegration or computer-generated virtual worlds" (2008: 193). Common features of cyberpunk are designer-drugs used to boost the physical and mental boundaries and prostheses for bodily modifications, e.g. weapons, x-ray vision etc., in addition to the sun hidden litter-covered streets and high rises, symbolizing the power structures and hierarchies, and uninhabitable wastelands outside the cities. The economic situation forces most characters either to engage in criminal activities, e.g. hacking data, or for women to sell their bodies, like for instance *Molly Millions* in Neuromancer who has her mind

[6] Luc Besson's colorful SF-movie was a centered around its visual aesthetics. Next to Moebius, who designed the city with much similarity to his early SF-comics, Jean Paul Gaultier, the famous French star designer was responsible for the outfits and costumes.

switched off during sexual intercourse so she can't remember her activities as prostitute. Melzer specifies: "In Cyberpunk poverty translates into prostitution and professional surrogate motherhood for women, while men hustle - either as console cowboys or pimps who deal in women, drugs, and software" (2005: 163).

Most cyberpunk literature has been written by men and, therefore, the depiction of women is often very androcentric and rarely takes a critical approach in questioning classical gender-roles. Cyberpunk's view of identity is often very individualistic and does not offer any alternatives. With female cyberpunk author Pat Cadigan, for example, there has been a shift in the contents of the stories and contemporary cyberpunk enthusiasts hope to overcome racist and sexist prejudices existing in the material reality (Vint 2008: 104).

Although the majority of cyberpunk literature depicts virtual worlds and adventures within those worlds, several classical SF works about cyborgs or dystopian futures (which I am going examine in the following chapter) are also considered cyberpunk because of their settings, even if they don't introduce any form of a matrix.

III.Neuromancer

Neuromancer, taking place partly in the cyberspace, partly in the "real" world, is the major influential work from which most SF-cyberpunk novels draw their influence. Written in the beginning of the eighties and then published in 1984, Gibson was disappointed that he did not manage to release his work ahead of time since *Blade Runner* had appeared in cinema in 1982. Gibson feared that many people would think he took the visual aesthetics from *Blade Runner*, which he personally thought to be the first movie with a cyberpunk look. *Neuromancer* is first novel in the Sprawl-Trilogy. The Sprawl is a type of megacity along the East Coast of the U.S., where Boston has grown together with many different cities to become a giant sprawl down to Atlanta - BaMa. In this urbanized surrounding corporations rule and the average person is degraded to roam the garbage-littered streets in a constant battle for survival. "Black factories" exist in the side-alleys which offer surgical assistance for implanting prosthesis.

We have a dark dystopian post-industrial world presented to us. One of the flaws in the imagery of Gibson was that he overestimated the power of the

corporations, which he envisioned as the future leaders of states. After two decades have passed, the shift in power towards the financial sector has grown stronger. Gibson is not really dystopian since he introduces a lot of technological imagery in his text, but there is no critique of traditional power structures throughout *Neuromancer* (Baccolini 2003: 71). The power structures remain and there is no utopian outlook. On the other hand, Gibson's cyborg imagery, which reinstates the humanist position, differs totally from Haraway's concept of the cyborg as a self-deconstructor of humanism.

In the world of *Neuromancer* we are introduced to a former hacker named Cage. Cage was a "console cowboy", until the day he messed up a run[7] and had his ports, through which he had direct access to cyberspace once jacked in, destroyed. Since that day he is not able to re-enter the cyberspace, which made him become depressive, because he is trapped in the "meat", that is the entrapment of the mind in the physical body. To compensate for the loss of enjoyment of the VR Cage turns into a drug addict but can't overcome his emotional problems, thus going further and further down the spiral. (Cage murders for money so he can afford his drugs. He is depicted in the way we imagine classical junkies to be). One day he is approached by a female *street samurai*[8], Molly Millions, who is working for some mysterious person called *Armitage*. She offers Cage a deal in which he will have his pods for access to the cyberspace restored and in return he will have to hack into a computer system and steal certain information. With time it becomes clear that Armitage is a former soldier and only survivor of a military operation in Russia which went wrong. He has lost his memory and is now controlled by a mysterious entity, Wintermute, who is revealed later on to be an AI who wants to become something "more" or as Wintermute puts it: it wants "personal" evolution. In the future, the development of AI's is forbidden under so-called *Turing*-laws[9]. Cage becomes the instrument of liberation for

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[7] Gibson´s use of the term run, for a mercenary missions, became popular throughout SF

[8] "Cyberpunk fiction similarly incorporates many references to popular culture. William Gibson said of one of his novels, `Neuromancer` is filled with these bits and pieces; it's very much a homage to something. I didn't really think of it as a book, I wanted it to be a pop artifact' (Collins 2005: 168)." There are many references to Rastafarian-culture, Asian-culture and Pop-culture.

[9] Alan Turing (23.6.1912 - 7.6.1954): English mathematician, who created the Turing-machine, a forerunner of the modern computer.

Wintermute. Using his re-obtained cyber-skills Cage starts "jacking in" again, enjoying once again the experience of cyberspace, proving his real strength to be in the VR. In the cyberspace the deadly ICE[10], security programs which can flatline a hacker's mind, are a deadly menace, but only for the "runners". The cyberspace consists of geometrical forms and lights and data highways. At the end of the story, Cage manages to set Wintermute free and it fusions with Neuromancer to become a new form of AI. Although Wintermute is portrayed as extremely omnipotent, he is not able to set himself free without exterior help. The melting together of Neuromancer with Wintermute makes them become a new entity, the entire matrix. In the succeeding novels traces of the new entity still exist in the internet in form of voodoo deities, but Wintermute has vanished in search for other AIs in outer space.

IV. Welcome to Cyberia: The Matrix

The Matrix is not concerned with the idea that humans will transform into man-machine hybrids, but more with the question how reality is experienced and is similar in its approach to *Ghost in the Shell*, in which life exists/can exist in form of digital data, with no material agenda. "No need for architecture, we've got Facebook now" (Gardner 2009: 122), already lets us know towards which kind of future we are heading which is probably the basic idea of the Matrix: we are all going to become ghosts, not in a shell, but in the machine. In the Matrix every human being already has entered a posthuman phase of existence. The body has become extinct and is neglected in the future of mankind. Matrix offers a very classical view on the question of mind/body dualism. "Matrix" originates from the Latin *mater*, meaning mother and womb.

In contrast to *Gibsonian* cyberspace, the virtual world is not experienced consciously as a place of digital architecture with its own sensations, but as a representation of contemporary reality surrounding us. The inhabitants of the Matrix do not realize that they are living in it and the digital representation is one's self (Melzer 2005: 153). There are no geometrical forms and digital lights with data flowing by, but simply a never changing version of any postmodern American big city. Outside of the Matrix the world has become uninhabitable due to a war between machines and mankind, turning the surface of the planet into a form of post-nuclear

[10] Intrusion Countermeasures Electronics: cyberspace defense systems.

wasteland. The survivors travel the planet by spaceships. There is one last free town remaining with the biblical name Zion. There are many representations of religious motifs in the movie in general (Herbrechter 2009: 119).

Neo, a computer hacker, feels that in his existence something is missing. A group of renegade hackers approach him and explain to him the reason for his feelings: he is not alive but instead is trapped in a computer-simulation called The Matrix, stimulating his mind and consciousness. This stimulation is needed to keep the body of the humans alive, who serve as batteries for the machines. The year is not known but is assumed to be about 200 years on in the future in which mankind has lost domination over the world to the robots. In a final battle man tried to darken the sky so that the robots and machines would have their energy source taken from them (implying that all machines run on solar energy). Unfortunately, the plan did not succeed and the intelligent machines found a new energy source: the human body. Therefore, mankind has been enslaved by the machines and kept in special facilities which continuously reproduce humans using the warmth of the body as power supply. The human being has become an organic battery; the consumer has become the consumed. The Matrix was developed by the machines especially for the task of keeping the mind of the humans alive, but a certain emptiness remains in the souls of some of the digital inhabitants of the Matrix. The renegade hackers free these people, who are on the search for "more", a deeper meaning in life (a very religious aspect), from the Matrix and show them the real world which does not really exist anymore, in order to raise their awareness, which means freeing the world from the machines and destroying the Matrix.

When Morpheus confronts Neo with the truth behind the Matrix, he gives him the choice to decide between two pills, one which will make him forget everything he has been told about by Morpheus and another, which he decides to choose. By doing this a psychedelic mind-enhancing type of trip begins, opening the conscious and awakening Neo from his sleep. During an early scene, Neo is holding a copy of Jean Baudrillard's *Simulacrum and Simulation* in his hand, hinting at the idea that everything happening is a form of hyper-reality (Toffoletti 2007: 33). Baudrillard distinguishes between orders of the imagery appropriate to the three successive orders of simulation: the first being the utopian, the imagery realm attending the order of representation, in which signs and values are made to represent an original order of

natural signs; secondly, followed by the order of production and work, the simulation-culture of the bourgeois order, in which signs and values strive for equivalence to the original; thirdly and lastly, the simulationist order of the hyper-real, the cybernetic striving for complete operational control over the signs and values (Criscery-Ronay 1991: 389). At the end, simulation does not reproduce reality, nor does it hide it; simulation starts to produce reality, which is then referred to as hyper-reality (Toffoletti 2007: 33).

Neo is the so-called "Chosen One", a type of archaic messiah depending on modern development who shall bring about the change. His personal saviour Morpheus believes strongly in this notion. Teaching him new abilities through the usage of computer-programs linked to a person's mind, Neo learns all kind of new abilities in order to return to the Matrix and combat the system and its agents with superhuman powers, defying all laws of physics. The victim of the system uses the system in order to precisely fight the system. Everybody inside the Matrix could be a potential agent, therefore Neo has to decode the facade. The allegories with modern society are very clearly presented. Neo accepts his fate and by realizing that inside the Matrix anything goes, he is successful in achieving the status of the saviour-to-come (which is not presented in the first movie, leaving the end open).

In the end of the first movie he is able to decode the Matrix, sees behind it and recognizes the world of 1-and-0's. Neo is in reality a form of posthuman warrior, a super-being, but only in digital form, since all of his powers really only exist in the machine. In reality he is a vulnerable a fragile ordinary human, with a pod to his brain that he can directly link in to the internet or the world of the Matrix, where his true potential can be unfolded. This takes the idea of the recovery of the body *ab absurdum* and really is only a recovery of our mind. The sequels, and mostly the third instalment with its final conclusion, even if unsatisfying, try to establish another posthuman Neo in comparison to the first movie with its "conservative message about an 'essential' human body" (Melzer 2006: 154) through which the 'real' reality can only be experienced. Its heavy religious undertone presents to us a divine-type of Neo, with special powers, which is later revealed to be a counter-virus, a wetware-software hybrid, created to combat viruses and malware, represented by Agent Smith, affecting the status quo between humans and machines:

> Wie sich herausstellt war Neo nie ganz Mensch oder Maschine, sondern etwas "Drittes", also metaphysisch gesehen eine Leerstelle zwischen Fiktion und Realität, nämlich

> Software. Weder "hardware" noch "wetware" zugehörig, ist Neo im Grunde ein reines "Medium" oder das Übersetzungsprinzip und versprochene posthumane Subjektivität [...] an sich (Herbrechter 2009: 119).

There are many similarities in the Matrix to the works of Gibson, but many aspects differ largely. One striking point is the strong female character which helps the protagonist during the course of the story. "Trinity's strength, skills, and black leather attire remind us of Molly Millions, Gibson's technologically enhanced female figure that roams the Sprawl of his narratives, a descendant of Joanna Russ's Jael in 'The Female Man' (1975)" (Melzer 2006: 157). Clearly, the Amazon lady, the femme fatale, has always been attractive and frightening at the same time and a permanent feature in SF stories. In comparison though, Molly Millions, who follows no one really, is a clear character in her own way with "any maternal/sexual object function she might have for Case is foreclosed by her self-agented professional attitude and actions" (Harper 1995: 406), while Trinity serves as the female mother-like figure, giving herself to Neo and supporting him on his way to become *posthuman* through her "unconditional love and self-effacing femininity"; a very human ingredient (Herbrechter & Callus 2008: 106; Herbrechter 2009: 119). Unfortunately, most cyberpunk stories don't present a positive attitude towards women, but often depict them as entire male chauvinist fantasies. In general, they appeal to male readership which is stereotypically white, male and technophile; except for the new wave of female SF writers offering different notions of posthumanism. The expression "jacking in" describes the pleasure of the male-computer interface, suggesting male masturbatory fantasies of heterosexual unification with the feminized technology; although the hackers search for transcendence of the meat, cyberpunk always brings back the body back, even if it has become obsolete (Fernbach 2004: 245).

There is also an alternative reversal reading of Molly Millions, possessing physical strength which Cage does not have, since his body is weak and fragile (Vint 2007: 105). The other aspect of criticism is the focus on the individual rather than a collective group of people, as can be seen in the Matrix, which places its hope in a form of *Übermensch* for the liberation of mankind. "The two most common criticism of the genre are that it is merely misogynistic, boys'-own-fantasy escapism, and that it offers only individual transcendence of, not social solutions to, the problems it diagnoses" (Vint 2007: 103). Under these circumstances the cyberpunk genre does not offer much of a positive alternative vision of the posthuman.

V.Liberation or Enslavement?

Looking at both of these works expounding on the possibilities of living in a digital created environment, there are many questions which we are confronted with and challenge our own thinking of the basic definition of what it means to be human.

As mentioned above, one of the leading figures of the debate, Hans Moravec, believes in the possibilities of uploading our consciousness into a computer and our mind becoming data. The movies analyzed above "do assume that human heads, or rather what is inside of them, is purely locatable, something to be read, analyzed, transferred, circulated, exchanged, grasped, held, and manipulated" (Chilcoat 2004: 169). This idea seems to be very attractive to many people, who think they can overcome the limitations of life, e.g. death, body, and develop into a new type of human being freed from the "meat".

But there are ideas which stand in opposition to this notion, as Cooke points out, that "the fantasy of uploading one's consciousness had been replaced by the far more 'egalitarian' lowest-common-denominator fantasy of downloading someone else's consciousness from Amazon.com, or having your own consciousness pre-determined there in stripped down, agent-led shopping-preference form" (2006 :24). The vice versa of the imagined has taken place.

Many critics are anxious of the idea and even frightened of the vision of neglecting the body totally and that it has become obsolete. As Hayles points out in *How we became Posthuman*, the bodily experiences can't be separated from our perception of our human identity (1999). Our human identity and nature is constructed through the importance and the roles we model onto our bodies. What are we to do with the aspect of gender, which will become obsolete in cyberspace, since forms of sexuality relying on the body can't be practiced anymore and are maybe replaced by virtual sex? And does the virtual offer the same forms of satisfaction like the material world? We already can see that people cross gender boundaries in the internet, taking up the opposite gender in games or different social media platforms and interpreting their view of gender behaviour in a new way without state institutions and their control. Hebrechter writes:

> Dezentralisierte Medien wie das Internet mit seinen neuen Möglichkeiten und Mechanismen zur Subjektkonstruktion übt größtenteils radikale Autonomie gegenüber staatlicher Intervention, internationaler korporativer Interessen, sogar gegenüber dem

> allgegenwärtigen Markt. Sowohl neue Formen individueller Identitäten (Facebook, Myspace, Avatare in Diskussionforen und Chatrroms und bei Online Gaming) als auch neue Kollektivitäten und "assemblages" (MUD, MOOs, usw.) heben eine zunehmende Verquickung von Mensch, Medium und Technologie hervor und machen das traditionelle auf Autonomie begründete liberal-humanistische Subjekt obsolet (2009: 161).

Valeska Lübke gives a good account of gender-crossing and gender performances in the internet in "CyberGender - Geschlecht und Körper im Internet" and how these internet identities or virtual bodies are influencing the attitudes of the individuals in everyday life. Furthermore, disembodiment does not occur in the internet but a new form of embodiment takes place (Lübke 2005: 58), based on our permanent identity constructing, by which we define our persona. Taking these aspects and working them through, we can see how the internet also challenges the classical gender roles and that people are interested in new interpretations of themselves. As mentioned above, being free from the physical and material reality, in which our body exists, can liberate us from the prejudices we place on "impure bodies" and the construction of the "other" as a threat to our own norms. But in the end, the notion that online personas transcend social and cultural hierarchies still remains a utopian myth (Chilcoat 2004: 248).

2.The Cyborg

I.I'm a cyborg, but that's OK

In order to better understand the following sections on science-fiction movies, we should first take a look at the definition of a cyborg. A cyborg was known by many names e.g. android, humanoid and replicant. The term was coined during the 1960's by Manfred Clynes and Nathan Kline in an article for a magazine discussing human-machine systems, since both believed the human being has to adapt in order to survive in an extraterrestrial environment in the future. They thought the cyborg as a "self-regulating man-machine system". Clynes was the chief research scientist in the Dynamic Simulation Laboratory of the Rockland State Hospital, New York, and Kline was a clinical psychiatrist and Director of Research at the same hospital (Haraway 2004: 299).

A cyborg, in science-fiction, is basically a hybrid between a robot-machine and human or biological tissue; in some stories they may even possess a real human brain. The cyborg is a human subject augmented by chemicals, bionic prosthesis and neural implants.

The idea for the concept of the cyborg in stories originated through Norbert Wiener's cybernetics science and the preceding android novels from Russian writers like Isaac Asimov and Stanislaw Lem, to name probably the early two most influential novelists. The analogy in the development of the cyborg in novels can be traced back to first the robot, then the android, which was nearer to human and finally the cyborg as its fusion. As I have already mentioned, several critics have claimed that we are all cyborgs, since we introduced technology into our everyday lives. The cyborg, the synthesis between machine and human, is regarded as the next unpreventable stage in the evolution of human.

But again, there are two sides to the origins of the cyborg. "Cyborgs beginning with mechanical systems to which human characteristics and identities are integrated are always *made to kill*. Cyborgs beginning with a human being (if not a human body) with an existing identity and personal history are generally *made to survive*, clearly a desirable feature for feminist politics" (Croissant 1998: 295). We can see the fear and anxieties that the military is exploiting the cyborg potential merely for their "war

games"[11]. The fear exists that all apparent natural distinctions in our world will crumble, once we all become cyborgs. Technophobic standpoints are often presented in SF novels. "Fusing cybernetic device and biological organism, the cyborg violates the human/machine distinction; replacing cognition with neural feedback, it challenges the human-animal difference; explaining the behaviour of thermostats and people through theories of feedback, hierarchical structure, and control, it erases the animate/inanimate distinction" (Hayles 1999: 84). It is an idea, which seems very frightening for many people, but also attractive for many others as is in the case of the transhumanist movement.

Liberating ideas linked to the cyborg and its useful potential come from feminist thinkers and writers such as Donna Haraway with her essay "Cyborg Manifesto". "The cyborg became some saviour from the strictures of identity and identity politics; fluid, changing, malleable identities fast became the principle conduits of exchange in 'virtual' realms" (Cooke 2006: 21). Haraway's cyborg concept was a radical new approach to the question, "what are we to think of the cyborg?" But first, let us take a closer look at influential works of popular culture featuring various models of cyborgs.

II.Cyborg Stories I: Living on the Edge - Blade Runner

In 1982 *BladeRunner* was released, a motion picture adaption of Philip K. Dick's *Do Androids dream of electric sheep?*. Dick published his work back in the 1960's and ever since has written well-known Sci-Fi novels, dealing with similar topics e.g. *TotalRecall, Minority Report* and *A Scanner darkly.* In most of Dick's novels technology acts as the long arm of the government, breaching the grounds between the public and the private (Galavan 1997: 418). Hayles writes on the content of the novels that Dick took up many ideas from scientific literature, extending "the scope of inquiry by staging connections between cybernetics and a wide range of concerns, including a devastating critique of capitalism, a view of gender relations that ties together females and androids, an idiosyncratic connection between entropy and schizophrenic delusion, and a persistent suspicion that the objects surrounding us

[11] A movie with this title from the early eighties depicts the danger of a computer-program not being able to distinguish between simulation and reality and therefore wants to start a nuclear missile attack on Russia.

- and indeed reality itself - are fakes" (1999: 161). Questioning reality becomes one of the main points in *BladeRunner* movie.

BladeRunner opened up modestly at the box offices, but went on to achieve cult-status after its release on video and later received huge recognition by critics internationally. Ridley Scott changed a part of the original book, adding a twist to the story leaving one of the major questions unanswered: is Deckard a replicant? The director's cut solved the mystery concerning Deckard's identity. Unfortunately, Dick died shortly before the screening of the movie and never had a chance to comment on it.

BladeRunner takes place at the beginning of the 21st century; mankind has been successful in the development of artificial life and intelligence. Humanoid robots, cyborgs called replicants are created to serve mankind in different ways. From working force up to pleasure cyborgs, the whole diversity of society is reconstructed through the replicants, who can be viewed as slaves. Replicants started to riot and did not accept the fate as slaves for mankind, the reason why earth government sent these androids into exile on Mars. Six replicants of the Nexus-6 generation return to earth on the search for more "life", since the replicants only have a lifespan of 4 years. Two of the replicants are killed, while trying to break into the Tyrell Cooperation. Deckard is a disillusioned bounty hunter, who takes on the job to eliminate the 4 remaining androids, which is called "routine retirement". His nemesis is the leader of the replicants Roy Batty (the initials of BladeRunner inversed). The hunt begins through the whole of future Los Angeles and after a while it is not clear anymore who the good is and who the bad is, who is human and who is not? Deckard eliminates all the replicants, except Roy Batty, who saves Deckard's life at the end of the movie. Roy Batty, at his moment of death, realizes the real value of "life", with his famous last words that "all memories will be lost in time, like tears in the rain" (Scott 1982). Deckard returns home with a last order to kill Rachael, but refuses and escapes to Los Angeles "with her to spend whatever little time her short, engineered life leaves them together in a different world, as a last shot indicates, a realm of light, greenery and life, rather than the dark, rainy cityscape which has produced them both" (Telotte 1983: 49). The end shot is the only scene in the movie, where we can see daylight.

The central question of Blade Runner revolves around what makes human a human? Is it his memory which forms his identity? "The problematic nature of human

nature is precisely the topic on which Blade Runner with its formulation of doubling motif attempts to shed some light" (Telotte 1983: 48). The doubling refers to the capability of creating human doubles - the replicants.

"Let me tell you about my mother...," then comes the blast from the gun which is the answer given by Leon, a replicant, right at the start of an interrogation by a BladeRunner. The mother theme is very essential to defining someone's personal past and history. The mother is the root, the origin of a life, background, past and identity. Replicants, who are artificially created, do not have a mother. They did not enter life and this world according to the laws of biology, but by the laws of modern science and technology. Therefore, the existence of a mother is denied which creates an emotional gap in the replicants. Leon reacts very nervous to the question posed and his answer is a violent one for being angry about this fact. Rachel, a replicant of a newer generation who does not know that she is a replicant, believes she has a past and is human (even if it is only constructed) because she has a picture of her mother which symbolizes memory. Pictures are a link to the past and construct memories, even if these may be false as seen later during the movie that the pictures are manipulated to give the androids a identity, which makes them emotionally more stable (and easier to control). The Nexus-6 replicants know about their fate and due to the short life span, they are looking for answers, identity and more life. The humanoids under the leadership of Roy Batty, the "fallen angel", approach their "creator", the *deus absconditus* in the words of Raimar Zons (2001: 242), Tyrell, the head of Tyrell-Corporation and inventor of the replicants, but unfortunately he is not able to fulfil Roy Batty's wish for more life. The replicants are already, using Tyrell's quote, "more human than human", physically stronger, equipped with better memory (-devices) than normal humans and emotionally very intense (in comparison to the inhabitants of L.A. who behave like robots), only restricted in their lifespan. If the creator is not needed anymore, than he is sent to the grave and so Roy Batty seals his "fathers" lips with the kiss of death, before squeezing Tyrell's eyes into his sockets. The gift of seeing is taken away. The eyes play a major role on the question of identity. The replicants eyes are analyzed during interrogation, since the eyes are considered the key to the soul in old mythology. Deckard's perception of reality is questioned while taking a look at the videos recorded during Leon's interrogation. Originally, he says: "my mother...let me tell you about my mother". And on the recording Leon says: "I'll tell you about my mother." It is argued, until now, if this

was a directing mistake made by Ridley Scott or if this was meant for the viewer to question what he might see, hear or experience with his own senses. The perception might be flawed. Deckard must confront himself more and more with what he believes to be true or not while the story evolves.

Deckard personally increasingly becomes like a machine during his mission to terminate the replicants. The bounty hunt for the replicants is called a "skin job", a job implying that their elimination is not murder. But even this is questioned in the death struggle of Pris and Zhora, shown in slow motion of how Zhora is shot cowardly in the back by Deckard, then crashing through windows and dying, while the feathers are falling down like snowflakes and of how Pris fights for her life in spasms of agony. Is Deckard really only destroying robots or killing living beings? This becomes even more problematic when Deckard starts to realize that he is not the human he thought his is. Gaff, the cop who hires Deckard for the mission, is a typically stereotype LA cop, "the kind of cop that used to call black men niggers", and very talented at origami. Deckard notices that he himself might be a new generation of replicants just like Rachel, Tyrell's personal assistant and a new generation of cyborgs, who are not aware that they are replicants. "The replicant Rachel in the Ridley Scott film Blade Runner stands as the image of a cyborg culture's fear, love, and confusion" (Haraway 1985: 178). And further, with "the character of Rachael, Tyrell's nearly perfect replicant, this increasingly blurred distinction between man and the copies with which he has become obsessed finds its clearest example" (Telotte 1983: 49). Rachael is nearly raped by Deckard after she visits him in his flat. Instead of fighting against Deckard for his attempted abuse, she "passively gives herself to the hero, returning again to the position of passive human/machine object" (Harper 1995: 415).

In one scene Deckard dreams of being naked in a forest and he sees a unicorn walking by. Dreams are something personally which nobody can take a look at or control. They belong to one and define the person. This notion is addressed when Gaff, at the end of the movie, places an origami unicorn in front of Deckard's door before Deckard escapes from Los Angeles. Deckard is shocked by the fact that someone has insight to his dreams. Insight, or are his dreams given to him by his creators? Which means that he is not human but only a reproduction of a human with false memory and identity given to him, making him believe himself that he is a human being? „In BladeRunner geht es - auf Messers Schneide - um das Ende der

Unterscheidungen, um den Wärmetod der Differenzen - und um die vermutlich letzte und schwerste narzißtische Kränkung des Menschen: um die Unhaltbarkeit der *anthropologischen* Differenz“ (Zons 2001: 235).

The director’s cut differs at this point from the original, which was more in keeping with the book displaying Deckard as human, but through his job he behaves more and more robotic, while the later cut clearly defined Deckard as a cyborg which would explain his emotionless behaviour. BladeRunner’s strength is the breakdown of the typical dualist oppositions, which are central in most movies. There is no clear distinction between good/bad, reality/illusion, human/machine, through which Scott takes a critical stance on our classical western thinking. It would be interesting to pose the question if the name Deckard, which is pronounced the same as Descartes, should give a hint at the state of knowing and consciousness of the main character, since Descartes was concerned with these ideas in his writings: *cogito, ergo sum*. In BladeRunner the replicants think, so are they to be viewed as “independent subjects”? If this should be the definition for rational beings, what are we to make of the replicants? Since their main problem is the lack of empathy, emotions being the apparent essence of humanity.

III.CyborgStories2: Armoured Bodies

Terminator was James Cameron’s breakthrough movie, which paved the way for him to become one of Hollywood’s most successful directors of all times at the box offices, with blockbusters e.g. *Terminator 2, Titanic, Avatar*. James Cameron had learnt the art of movie-making by Roger Corman, master of schlock-cinema.

Terminator was not a big budget movie and Arnold Schwarzenegger not yet a big movie star, after switching from the world of body building towards “acting”. This was the movie which would truly turn him into the menacing action icon he would later represent; the unbeatable, hyper-masculine, pumped-up being who mainly responds in a simple way to problems - with violence. Schwarzenegger has become the Terminator eliminating everything in his way in nearly every following movie. Actor, artificial figure and real person fall together, and therefore it should not be surprising, that Schwarzenegger is referred to in media and newsreports as the

Governator[12], implying he is able as a politician to "terminate" any kind of problem. "Arnold is not only the perfect man, he is the perfect postmodern, Puritan pilgrim: demonstratively humanoid and incarnate, and thus of this world, but retaining just enough of his Puritan/fascist discipline in order to not be corrupted by it" (Larson 1997: 63). The perception of Arnold Schwarzenegger as a type of role model representing Puritan values has suffered suddenly after the scandal about his illegitimate son early in 2011 (S.P.O.N. 5/2011).

In *Terminator*, the battle for the future has started; a future, in which mankind borders on extinction and the machines have taken over. The few moments, in which we see the future, are dark and menacing. Several groups of people have survived the nuclear holocaust, which the master computer program of Skynet had started in order to annihilate mankind. It is a future, where men have lost their dominance and control over technology. The only hope for mankind is one single person John Connor, with the divine initials JC. Once again with have a figure of an all-saintly messiah[13] who is the only chance for freedom of mankind. Skynet has tackled the problem of time travel and sends a T-800 model back to present day (at the time of the movie it was in the 1980's), in order to terminate the mother of the not yet born leader of the resistance. Of course, the resistance sends back one of their own men to protect Sarah Connor. Braidotti notes on the religious aspects, that "In Terminator I the male prophet descends to earth and to ensure that the elected female does reproduce the future Messiah, thus saving the humans" (2002: 208), limiting the role of the female entirely to the mother figure, which I pointed out earlier with Trinity in the *Matrix*. The Terminator starts a killing spree, using the telephone book to find all women who are named Sarah Connor. The real Sarah Connor escapes with Kyle Reese, the soldier from the future, who later gets Sarah pregnant with John Connor. After a long chase, running away from the Terminator, Sarah Connor manages finally to destroy the Terminator in a metal factory, crushing it underneath a metal press.

The torn off facial skin of the T-800 is probably one of the best known images

[12] A comic series with this title will be released. Of course, Arnold is the main hero. The stories will be written by Stan Lee, Marvel's creator and leading author. http://popwatch.ew.com/2011/03/30/arnold-schwarzenegger-the-governator-exclusive/. The series been dropped after the scandal.

[13] As with the Matrix and the lead character, Neo

of a cyborg covered with human tissue, but being completely out of metal under the skin. Many movies and comics[14] take up this image and rework it for further use, as with *Deathlok*'s cover of the first publication in 1990. As such, the Terminator has become one of the most influential cultural icons of male cyborgization, with its imagery being reproduced over and over in many forms of consumer products (Fernbach 2000: 235). (See appendix Fig.II.1.1 and Fig.II.1.2 P.64 for comparison).

Robocop (1987), in comparison to *Terminator*, provides us a real hybrid between technology and biology. Murphy is a cop in Detroit, who is lured in a trap and shot literally to bits and pieces. The Detroit-PD has been privatized and is run by *OCP*, Omni Consumer Products[15], the mega-corporation controlling Detroit. The only chance in saving him is turning him into a cyborg; but this also means the loss of his former identity and self. Murphy, reborn in a Frankenstein manner by the hands of Robert Morton as Robocop, has to come to terms with his new body; he does not fully control his new body and has to learn from scratch to be a crime enforcer. Coping with his new body and his new form of existence Robocop fights crime in the streets successfully, being almost invulnerable.

Through the course of movie, his memory of his previous life before he became Robocop starts returning. Robocop realizes he was the former cop Murphy, who had a family to which he can't return and also remembers the people responsible for his murder. One by one he eliminates them, until he realizes that the corporation who created him, OCP, is responsible for the criminal activities from the gang which murdered him. The construction of new military and security systems requires human bodies to work with. Robocop represents the new body, the new technologies at the working place and the automatization of the police. Robocop has a paradoxical role: one, which is feared for the dehumanization of mankind and the loss of work through the take-over of machines; on the other hand, Robocop is considered the only thing which can bring peace back to the decaying streets of LA, but again only as far as he has been programmed to do so (Croissant 1998: 295). After investigating and finding out the truth surrounding his death, and fighting off a other version of security robot, ED209, he finally is able to get his revenge by shooting Richard Jones, the main

[14] As I mention later, the Marvel comic Deathlok uses much of the Terminator's imagery.

[15] Verhoeven criticizes, by giving the company this name, the development of consumer mentality and its control through mega-corporations.

villain, who to begin with is protected against Robocop by a security directive programmed into Murphy. After being fired by his boss, who Jones takes hostage, the directive does not work for him anymore and finally Robocop is able to shoot the villain. In the movie plot, Robocop is accompanied by his female partner Anne Lewis, the only person who still sees the old Murphy who she knew behind his new appearance, while the other people see him merely as crime fighting machine. Through her assistance he finally becomes aware of his former ego and the value of being human, but does not return to his former self and his family; instead he continues as Robocop, although he responds to question of who he is by the OCP president with his name Murphy. In the end he accepts himself as a human and the movie closes.

Robocop deals with the issue of identity connected to one's own personal memory in similar ways to BladeRunner. We are what our memories make us. After Murphy is executed and re-animated as Robocop, he simply functions as a machine until the point his memory starts returning and therefore comes to realize who he once was. The moment of realization is followed by a moment of extreme agony as Murphy realizes he is not able to go back to his old life with his family, although he still is Murphy, he has become something different. He can feel for his family, as he says, but he can't fully remember them. But what is he now? Is he simply a machine with human consciousness or still a human with an "armoured body"? The movie decides that Murphy accepts his new fate and refuses to return to his family, which has moved away from Detroit after his "first" death, offering no alternative solutions for a new model for the nuclear family: the child, the mother and the robot-daddy. Since he still has his memories, which define his identity, there would have been the possibility for the alternative approach, instead of reproducing classical notions of families and humans. The second instalment, *Robocop2* (1990), explores the family theme a little more, showing Murphy in the beginning following his former family. OCP reprogram Murphy and try to erase the little bits of memory he still has and deny the little amount of human left in him, forcing him to accept the idea that he is nothing else than a machine.

On the other hand, Paul Verhoeven satirizes humanity's addiction towards new technologies. Anytime a new technological device or machine is introduced the first attempts to use the technologies basically go wrong, resulting in the death of

innocent people. One scene shows ED209 at his first appearance losing control, shooting and killing an OCP worker. In another, a news flash shows the results of a defence satellite losing control, firing of its laser cannons, destroying a part of California where the wealthy live and killing two former presidents. Techno-euphoria ends mostly in chaos. The second movie continues with the failures of technology, showing all new Robocop2 models to be mentally weak and committing suicide. As the psychiatrist Dr.Faxx, who is developing new cyborgs, explains the using of former cops, who were very macho and body-oriented, is not very effective because the disembodiment they experience by becoming a cyborg leads to an unstable self perception resulting in suicide.

IV.CyborgStories3: Fem-bots or Warrior-Queens?

The reason I chose the specific writings in this section is because of their huge international impact on the cyberpunk genre and the imagery of cyborgs, which was not often recognized by Western scholars until lately. Shifting towards Japanese mangas and stories dealing with posthuman representation, *Ghost in the Shell* has reached internationally a high reputation as being one of Mamoru Oshii's major works. Oshii's movies are in most cases very philosophical cyberpunk movies, as can be seen with the Polish coproduction *Avalon (2001)*. *Battle Angel Alita* is a still ongoing manga series, which will be brought to big screen by no one else than James Cameron, who seems to enjoy the topic of posthuman forms of existence, since he made *Terminator*, *Avatar* and the TV-series with strong similarities of its main character to the figure of Alita, *Dark Angel*[16]. Both stories have a female lead character.

Mamoru Oshii's '*Ghost in the Shell'* is an influential cyberpunk classic. The plot is centred on a female cyborg, Major Kusanagi, who works for a special government branch called Section Nine. Major Kusanagi once had a human body, but for her job her real body is replaced by a cyborg body, which in comparison to the real human body is physically stronger and not so vulnerable. Already here the classical western norm with a male strong protagonist is changed and instead a female is placed in the main role; she is by far superior to her male right hand Togusa, who is

[16] The main actor is Jessica Alba, who with her big eyes and ´petit´ figure bears similarities to female manga characters.

more or less entirely human. Kusanagi can only achieve this status through the modification of her imperfect female body using technology, which places the natural female as such in a weaker position, for Kusanagi at first is not able to do what she does. As a matter of fact no human being is, therefore Kusanagi is already physically one step further than any ordinary human being.

Major Kusanagi receives mission to hunt down a cyber-criminal called the "Puppet Master", a life-form completely put together by data and information, but with an own mind and consciousness making it believe (or feel) that it is a new species. Here the idea of artificial intelligence becoming independent is taken up again, although it only can exist in computers and the cyber-world of the internet.

There are different readings of the sub-text which Ghost in the Shell offers. Although the classical notions of western cinema are non-existent, since we have a female protagonist as the hero and the villain; even if bodiless it is more a male type of being. Carl Silvo claims that Mamoru Oshii did try to appeal to a western audience and says that in the end Oshii does portray the female cyborg as a sexual being (e.g. the nudity, while the male characters never expose themselves to this extent). "Kusanagi is thus reinscribed within one of our most familiar paradigms of femininity: woman as sexualized object for the enjoyment of the male gaze" (Silvo 1999: 67). At the end of the movie, although the Major is a cyborg, the natural idea of reproduction is introduced again. The Puppet Master has to unite with the Major to become a new life form, while this act of unification is more or less in the classical sense a sexual act between man and woman. "Surprisingly, however, this process of re-embodiment ultimately ends up gendering the material body in a way that perpetuates the body's historical construction within the narrative of patriarchy" (Silvo 1999: 68). In this idea it can also be seen that reproduction and the unification of opposite genders will always happen, no matter in which way technological development occurs.

Battle Angel Alita[17] (Yukito Kishiro) is still an on-going series dealing not only with cyborgs but also with nano-technology and its challenges, prostheses, and then again with the question of human nature. Unfortunately, research is still pretty limited on Alita. Humans live either on the surface of the Earth, which is covered in

[17] In Japan BAA was published under the title GUNNM

litter and trash, or surrounded by wastelands. High in the sky, Zalem, a city floats, connected to an outer orbit city called Jeru. Zalem's inhabitants are scientists or highly educated living in a Utopia. Their bodies are still "pure" and no modifications have taken place. The people living in Scrapyard produce the goods for Zalem, while Zalem in return dumps their rubbish onto the surface. Amongst this chaotic environment Edo, a scientist exiled from Zalem, roams Scrapyard until he finds the torso of a female cyborg. He reconstructs the body and brings the cyborg back to life calling her Alita. Alita doesn't remember her former self and starts on a quest for her identity. She becomes a bounty-hunter putting cyborgs out of control, then an athlete in a rollerball-type of game, then a rebel and a liberator. The fascinating side of Alita is the focus on the body and nano-technology. She does not remember her skills and identity, but her body does. Alita changes her body several times in the story, which in return alters her mind and emotions. Not only does the mind have influence on the body and controls it, but it return the body influences Alita's self-perception. At one point, she is given a berserker-body which proves uncontrollable, but is a powerful weapon. Alita refuses the berserker-body and replaces it with another. The berserker-body is stolen by Zapan, a character with a weak mind and depressive because of the death of his girlfriend. Being equipped with the new body, the berserk-body takes over Zapan's mind and sends him on a killing spree, which is stopped by Alita through tearing him literally apart. The interchangeability of bodies and body-parts is a constantly recurring theme during the series and Kishiro presents many version of what might happen to society through the use of new technologies. "Interestingly, Kishiro depicts two kinds of cyborgs: a biological brain coupled with a mechanical body [...] and a biochip coupled with an organic body" (Taillander 2010: 6).

At the end of the first series instalment, it is revealed that Zalem's people, who, because their bodies are pure believe they are superior to the people in Scrapyard, have their brain exchanged with a micro-chip when they are eighteen, in order for the master-control-program Melchizedek, in charge of Zalem, to create a perfect society with no delinquent behaviour. There is no clear distinction between the "pure" and "impure" body. Taillander writes that Alita "deals about shifting boundaries in a highly technological environment, no characters fit precisely into one of the corners but only symbolize the hybridization of some of them" (2010: 7). Kishiro does not reject hybridization as denaturizing nor embracing it as evolution like in transhumanist fashion, but makes the point that "human-hood" is defined in

complex ways, always in motion and never static, which widens the possibility for recognition of alternate "human" forms (Taillander 2010: 12). Alita is permanently struggling for recognition and social acceptance as a cyborg and acts many times more "human" than many humans.

V.Prosthesis

Prosthesis, a characteristic feature of cyberpunk, is not only a controversial issue concerning persons equipped with it, but also in a wider ethical sense. Are we allowed to alter our bodies through technologies and still consider ourselves human?

> *"The ambiguities surrounding the figure of the cyborg could be compared to the ambivalent feelings experienced by a person wearing a prosthesis. Prostheses enhance our bodies, but they also remind us of our failings, thus endowing us with a double identity: the better self and the failing self. Prostheses refine our capacities and alert us to out incapacities; they consolidate the edges of our bodies and simultaneously blur them (Cavallero 2000: 50)."*

In *Neuromancer*, Gibson frequently describes characters which have modified their body or replaced missing limbs with prosthesis. These visions of bodily modifications were not new; Television has presented shows like the *Six-Million Dollar-Man* [18](1974-1978), which had been was a major success in the seventies. The prosthesis is the first step on the way to become a human-machine hybrid.

As mentioned in the quote above, prostheses are very ambivalent in their representation. They confront us with the questions of the purity of the body and its apparent contamination through the insertion of technology into it. Technology made it possible for many individuals to survive physical disabilities, which in the past would have proven fatal. Stephen Hawkings, trapped to his wheelchair and electronic devices which help him to communicate with others, would not be able to contribute to the scientific world with his knowledge if he didn't use these technological devices. Furthermore, the evolution and domestication of human beings could only be achieved by employing these technologies. "In order to use a tool successfully human must incorporate that tool into their bodily image. Even without the physical inversiveness of "socket" technology, our tools - our machines - become extensions

[18] The show is based on the book *Cyborg* (1972) by Martin Caidin.

of ourselves" (Vint 2007: 119). For McLuhan, operations of the media serve the function of an prosthetic extension of the human (Toffoletti 2007: 124); a point I will get back to in the later chapter on Cronenberg.

Alita offers many variations of the theme of prosthesis: from microchips replacing brains, complete bodies with human brains, which we call cyborgs, or just limbs, which were replaced after their loss, similar to Gibson's bartender at the beginning of *Neuromancer* with his pink supplement arm. Prostheses have helped the survival and further development of humans, but "there are those in this society who actively and articulately resist cyborgification, who honour biology and give it primacy over technology, and who would vastly prefer to focus our efforts to transcend biological limitations on honing our intuition and our psychic abilities through meditation, organic food, and vision quests into the wilderness" (Davis-Floyd 2008: 260). This view limits the thinking of possibilities and chances resulting from the new technologies.

VI.Rethinking the Cyborg - A Benefit for Humans?

As we can see with the various concepts of the cyborg, there are many different thoughts concerning the future development of mankind. In some of the technophobic stories we are downgraded to machines, fulfilling the orders and work we were programmed to do or we abuse our creations for the same reason. The other scenario is that the machines will take over the world and gain dominance over humans: we will either become slaves or be annihilated totally.

The alternative concept helps us to rethink the norms of society and the core nature of what it means to be human, which can never be answered in its totality. The cyborg can have a liberating effect and force us to define our categories of gender, race, and humans in general, from scratch. At the same time the cyborg is an attack on the classical liberal humanism with the white male subject at its centre, breaking down the hierarchies and maybe leading to a more egalitarian society. As Haraway describes her ideas on the cyborg and the reason for writing her "Cyborg Manifesto":

> For me the notion of the cyborg was female, and a woman, in complex ways. It was an act of resistance, an oppositional move of a pretty straightforward kind. The cyborg was, of course, part of a military project, part of an extraterrestrial man-in-space project. It was also a science fictional figure out of a largely male-defined science fiction. Then there was

> another dimension in which cyborgs were female: in popular culture, and in certain medical culture. Here cyborgs appeared as patients, or as objects of pornography, as "fem-bots" - the iron maiden, the robotized mechanic, pornographic female. But the whole figure of the cyborg seemed to me potentially much more interesting than that. Moreover, an act of taking over a territory seemed like a fairly straightforward, political, symbolic technoscientific project (Haraway 2004: 323).

But then again Cooke raises the point that "the cyborg, that gleaming herald of a posthuman world, had lost the sheen it once had, no longer worthy a vehicle for encapsulating the fears and fantasies of a culture enmeshed in a global technological becoming. Imagine; cyborgism was about capital after all!" (2006: 24). The cyborg has become harmless with no revolutionary or transgressive potential, with global operating human resource management companies using its image for its brand-potential. The cyborg has become nothing else than mere tech-talk, nothing else than sign-value in Cooke's opinion (2006: 25). The cyborg at most times was a feature of Hollywood. So what are we to think of the cyborg now?

4.Cronenberg and Body-Horror

I.Cronenberg´s vita and his movies

Canadian movie-maker David Cronenberg presents us different visions of the posthuman, especially focusing on the bodily aspects. Born in the 1940's, he started studying first biochemistry in the 1960's, before he changed his subject to English literature. Before gaining international recognition after his successful remake of *The Fly*, he made many low-budget movies, some of them reaching cult-status. Although not really "good" movies they are enjoyed by fans for the bizarreness and grotesque style and are often very surrealistic. On the other hand, there have been many negative comments concerning the violence and sexuality depicted in them, preventing the critics from establishing a empathic connection between issues of the human body and society (Mathjis 2003: 31). The narrow mindedness of the critics prevented a more detailed analysis of the films, leading to many movies being considered as metaphors for the AIDS-virus. In the meantime, his movies have been the focus of academic research and Cronenberg has received several awards and was a member of juries at different international movie festivals, e.g. Cannes.

Many of his movies were considered to have established a new genre in cinema: the body-horror. Body-horror centres on the visual destruction or disintegration of the physical body through e.g. diseases, parasites, mutilation and mutations. *Shivers, Rabid, The Brood* mark the beginning in a line of Cronenberg movies dealing with the penetration of the flesh by an alien or something other, may this be a living thing or a machine, as well as the mutation of the body after being penetrated. Young gives us a summary of the basic ideas of his movies:

> Cronenberg's films target the isolating thrust of civilized society as the breeding ground of uncontrollable monstrosity; they insist that the monstrous is not in our natural but cultural selves - in our efforts to quell flesh, sanitize speech, and sublimate desires; and in our "civilizing" institutions to keep the monster from rearing its ugly head (2002: 298).

Dinello considers that corporate techno-science and viral invasions are at the center of Cronenberg movies, which are surreal and disturbing, with bodies exploding, violated, distorted and disfigured by technological and viral invasion (2005: 202). And Bukatman writes in relation to the meaning of the body, that "in contemporary SF and

horror, the body is also narrated as a sight of exploration and transfiguration, through which an interface with an electronic-based postmodern experience is inscribed" (1991: 343), which can be seen in Cronenberg movies. Bukatman links Cronenberg with McLuhan's vision of a new stage in the development of man. The spatialization of both bodily and viral forces presents a collision between McLuhan's extension of the body beyond its biological boundaries and Baudrillard's vision of the usurpation and dissolution of individual power (1991: 83).

Two of his works, which gained higher attention than many of his other movies, are *Videodrome,* considered a postmodern classic, and *eXistenZ*, both dealing with the concept of reality, its perception and the changes of the body, best exemplified in the following short quote from *Videodrome*: "Kill the old flesh - Long live the New Flesh!" (Cronenberg 1983). But what should this new flesh be and how should it look like? And what are we to call the results: mutants, cyborgs? Or simply freaks?

Cronenberg interrogates the classical mind-body dichotomy, in order to establish a new form of trichotomy: that of mind-machine-body. He views mind-body as undividable connected phenomena. The machine doesn't become a prosthesis for a intact part of the body but remains the "alien other", which appears as catalyst for or effect of bodily deformations and can become an enemy or sexual partner (Papenburg 2007: 128).

II. Video-word made flesh!

Videodrome from 1983 is considered one of Cronenberg's early 'masterpieces'. Up until now it is considered a postmodern example for cinema, breaking down boundaries between reality, illusion and one's own perception. The viewer is lost during the course of the movie between what is really going on and the protagonist's imagination. Bukatman describes Videodrome as an estranging portrayal of image addiction and viral invasion, caused through a destabilized reality in which image, reality, hallucination, and psychosis fall indissolubly together (1993: 85). Braidotti writes that Videodrome is a classic, because it addresses the issue of the physicality and the corresponding malleability of the male body, while showing to what extent the body is constructed (2002: 24).

The title Videodrome reflects the idea, that there are similarities between

Videodrome and the Hippodrome, an open arena. Videodrome is a contemporary equivalent to the coliseum, in which the audience is politically silenced through the orchestration of violence (Papenburg 2007: 90).

James Woods plays Max Renn, an owner of a private Cable-TV station. He is always searching for the newest violent and pornographic material for his station in order to keep his viewers interested and excited. During his search he discovers a pirate TV-Station showing Videodrome, a torture-snuff show. Apparently, the show is televised from a Third World country. Renn starts to enjoy the content of the show and presents it to Nicki Brand, a psychiatrist Max starts dating after a talk show where he gets to know her. She also becomes attracted to the content of Videodrome. After a sadomasochistic sex scene between the two, while watching an episode of Videodrome, Nicki searches for the origins of Videodrome which they both believe to be sent from Pittsburgh. Nicki never returns and Max starts his own search leading him to Professor Brian O'Blivion, who only appears on TV-screen and is one of the masterminds behind the sinister show, stating that "the battle for the mind of North America will be fought in the Arena: Videodrome".

Max Renn discovers the sinister plan behind Videodrome and finds Brian Convex, the man responsible for Videodrome and also for the murder of Professor O'Blivion. Convex is the head of *Spectacular Optical*, the company which developed Videodrome. The name of the company itself is ironical, referring to the sensation of visual spectacles. Brian Convex orders Renn to "Open up, Max. I've got something I wanna play for you". Renn's belly has mutated into an organic videorecorder, with a certain similarity to female genitals. Papenburg calls it the "videovagina" (2007: 102). Convex inserts a video-cassette into Renn, reprogramming him and making him follow the orders given to him. Renn pulls out a gun from his belly, which grows metallic extensions, penetrating Renn's flesh and fusing together with him, "an inversion of McLuhan's sense of technology as human extension" (Bukatman 1993: 92). In addition, the TV-screen in the movie also becomes an extension of the human being, replacing the eye and planting image directly into the brain. Renn goes to his TV-station, shooting his two partners involved in the TV-station. Videodrome's production company wants to take over Renn's Channel 83, so they can transmit the Videodrome signal to a broader public. Renn escapes the crime scene, pretending to be innocent. Videodrome turns out to be a government mind-control experiment and

Renn is the first victim not to be killed by the viral infection caused by the viewing, as his assistant Harlan remarks after revealing that he had been working for the program all the while. By watching Videodrome society should be purified from the people consuming shows defined as "filth". Refusing a next programming by Harlan his belly, or the new grown organ, mutates through Renn's will into a fanged video-recorder, a *vagina dentata* (Papenburg 2007: 103), ripping off the skin of Harlan's arm and hand while the rest of the remaining arm is turned into a hand-grenade. Harlan reacts with shock, looking at the rest of his hand and stumbling away from Max in fright. Harlan falls against the wall and explodes, making him fly through the wall. After Harlan's death, Renn goes and searches for Bianca O'Blivion, who he is supposed to kill, but is reprogrammed by her to shoot Convex. Convex, although only being shot, starts to disintegrate and his flesh rots away while dying. Renn makes his way to the final scene, the room where Videodrome was shot. Nicki Brand's image appears on a TV-screen telling Renn that she had never been real from the start. She was the original girl murdered on Videodrome. Her image infected Renn's mind from the first viewing. Nicki explains to Renn the last step he has to take to leave the old flesh behind and become the new flesh.

> I've learned that death is not the end. Your body has already done a lot of changing, but that's only the beginning - the beginning of the new flesh. You have to go all the way now. Total transformation. To become the new flesh, you first have to kill the old flesh. Don't be afraid. Don't be afraid to let your body die.

On the TV-screen Renn's image appears, placing the gun, which has now become completely a part of Renn's arm, to his head and triggering it killing himself. Instead of seeing the pictures of Renn's death, the TV explodes with organs and the entrails scattered all over the place. Renn understands that if he wants to become an image like Nicki has he has to commit suicide, which he finally does with the screen turning black.

The fascination of Videodrome is Cronenberg's focus on the transformation of the body and neural system due to the influence of new media technologies. There are many satirical aspects, as seen by the names given to the people with certain intent, especially with Professor O'Blivion, who only exists as an image or Brian Convex, who is the Head of *Spectecular Optical*. The next point Bukatman discusses is the

reliability of imagery, as he creates a permanent confusion between the real with the image and the image with the hallucination. In one scene Max starts to whip the TV with the image of Nicki on the screen, while the image is addressing him. Cronenberg does not mythologize the cinematic signifier as "real", but plays with this confusion he leaves the viewer with (1993: 91). The movie contains a lot of sexual and violent imagery in combination.

> Yet if Cronenberg is not ridiculing the sex-and violence connection, even if he is only promoting it on screen, he is probably only doing so to prevent it in real life. The main character of Videodrome, Max Renn, chooses programming for his pornography channel for a living, presenting hidden urges to the public in a way that parallels David Cronenberg's role as a director. As Max Renn puts it, "Better on TV than in the streets." According to such logic, enacting these fantasies on screen prevents the viewer from enacting them in real life (Goldberg 2007: 6).

The TV becomes the supplement for experiences in "real" life, stimulating the viewer sexually and getting him addicted to the image. The addiction is similar to that of a heroin addict, leading to bodily disintegration and abuse of the "drug", or in Max's case the image. Bianca O'Blivion, who is in charge of the *Cathod Ray Mission*, leads Max to her father through the building, walking pass image-addicts covered in robes and who are watching pornographic material in order to keep them silent. There are many motifs of religious beliefs in Videodrome, which can be clearly seen in the altered quote from the Bible "You have become the video word made flesh", and at the end, when Max destroys himself to be resurrected as the immortal "new flesh" - the image. He converts and submits to his new faith. Papenburg writes that the new interpretation from the Bible quote hints at the idea that technology has replaced religion, with Professor O'Blivion being the new media prophet (2007: 96). And the TV screen has become the temple of worship - the new god.

III.Death of eXistenZ

eXistenZ is often compared to *The Matrix*, since both deal with experiences in VR. But Cronenberg does not deliver a high-tech SF spectacle, but rather a dark vision with a pessimistic feeling to it. The fusion of the organic with technology

creates bizarre gadgets, e.g. the tooth-gun, baring similarities to H.R. Giger's[19] creations. eXistenZ is in line with Videodrome, dealing with similar topics and again with the focus on bodily transformations. "In many ways an updating of themes explored in Videodrome, Cronenberg's eXistenZ continues the auteur's fascination with protagonists seeking to redefine their corporeal and existential realities" (Chaw 2003). And Dinello describes the movie as an articulation of the relationship between humans and their VR entertainment technology leading to the point where the cyberspace world fractures and replaces the real world (2005:169).

Allegra Geller, a female game designer with cult-status, wants to release her latest creation called eXistenZ - the title of the movie. Before the release she tests a proto-version with a focus group. Twelve people are randomly selected from an audience. There are strong references to Christian religion, placing twelve people in a church surrounding the "game-pod goddess" Allegra Geller. Papenburg describes the scene as ironic because the audience reacts in an ecstatic way in the church, a place of worship, but here it is the technology which has become God (2007: 159). If a person wants to play the game his body has to be modified with bio-ports, with which they connect to flesh-pods through an umbilical cord. In the movie they are simply called *UmbyCords*. While in cyberpunk the hacker enters the cyberspace, in eXistenZ the game is transported into the player. The bio-ports are organic, having a life of their own and are pulsating. They look like a hybrid between a living thing and a technological device. Once plugged in they use the player as energy source and engage in a certain symbiotic relationship. During the game the pod makes sounds and squeals, further making the viewer think of it as a living being. Allegra treats them as little infants, when holding one. Dinello notes that this is a perverse twist on cyberpunk's neural implant technology, the bio-port pipes the game software from the pod into the player's spinal cord (2005: 169). While playing, the gamers are in a trance like state, laying on the floor and experiencing eXistenZ. Allegra Geller is attacked during the presentation of the game by a fanatic with a bizarre tooth gun. She escapes with the help of Ted Pikul, who becomes her bodyguard. Allegra's pod, which contains the only version of eXistenZ, is damaged during their escape. She wants to repair it and has to "jack in", but convinces Ted first to join her. Ted does not

[19] Suisse artist (*5 February 1940, Chur) and Oscar-winner, who designed the alien in *Alien, Species* and many other SF or horror movies. Well known for creating bio-organic paintings.

have a bio-port and first needs one installed. Ted, in contrast to Allegra, is technophobic and had rejected the bio-ports for this reason. Cronenberg alters and twists gender stereotypes with the woman's affinity towards and the male rejection of technology (Dinello 2005: 170). There are many sexual implications, but with a certain twist: The woman penetrates the male protagonists with the cord from the bio-port. The experience of *eXistenZ* seems to lead to a form of sexual gratification. Since both of them are on the run, the bio-port has to be installed illegally with the help of a strange odd character called Gas at a gas station. Gas uses a type of gun, shooting the bio-port into Ted's spine. The bio-port is placed at the lower port of the spine and looks like a hole, which can be stretched to shove the *UmbyCord* in. Through placing the bio-port in the lower back Cronenberg mocks the common notion of cyberpunk in which the hackers have direct access to the VR through their interfaces, which are normally connected to their brains. By doing this Cronenberg twists the hierarchy of the body around which gives normally a higher value to the head (Papenburg 2007: 175). Unfortunately, Gas betrays both and installs an infected bio-port which nearly destroys the game-pod after Allegra and Ted try to jack in. Gas is killed, and Ted and Allegra are once more on the run, bringing them to a scientist who repairs Allegra's pod and installs a new bio-port into Ted.

After both enter the VR of eXistenZ the boundaries between illusion and the game and the real start to crumble, but at this point we don't really know if everything which happened prior were "real" events. In the VR they discover new bio-ports which they plug into their body, entering new levels of VR. Allegra knows her way around the virtual world. When Ted is told to look for a Chinese restaurant in the forest and to order the special, he follows the instructions to proceed with the game. If certain key words and actions aren't said or done, the gamer gets caught in a type of loop. The Chinese waiter rattles off the chef's daily selection, explaining that mutant reptiles and amphibians produce previously unknown taste sensations. But Ted insists on the daily special and gets a dish that's really bony. The bones click together into a gun, similar to the one with which Allegra was shot. Ted is overcome by an impulse and takes three teeth out of his mouth inserting them into the magazine of the gun. He uses the gun to shoot the Chinese waiter, who had just served him his dish. After the bizarre encounter in the restaurant they stumble upon a trout-farm, in which the bio-ports are assembled. The game-pods are basically animals, as the scientist, who is specialized in repairing the pods, explains in the movie. In the manufactory, the

workers cut out organs from amphibic creatures and use their nerve cells to assemble the pods. Outside of the manufactory there are ponds, in which the eggs used for the pods are breed. Cronenberg shows the exploitation of animals by humans for entertainment.

Ted and Allegra enter deeper into the game. They are confronted by a technophobic group, Anti-eXistenZalists, the "Realist Underground", combating the game and Allegra. Allegra believes she has returned to reality, but when the house both of them are in is attacked by the Realist Underground they notice they are still in the game. Ted Pikul is revealed to be a member of the "Realist Underground" and his mission is to get close to Allegra, trying to kill her. Allegra suspected Pikul to be an assassin and had placed an explosive device in his bio-port with which she kills Ted. But suddenly, Allegra, Ted and other faces from the game wake up in a church testing a beta-version of a game called *tranCendenZ*. In this alternate VR, Allegra and Ted are not any more the characters they used to represent. They are a couple and the rest of the gamers, figures from eXistenZ. Ted and Allegra confront the game developer, who became sceptical by the course the game had taken. Ted and Allegra pull guns from the dog beside them and shoot the programmer and his assistant, shouting "Death to tranCendenZ". As they go to leave the church the Chinese guard at the entrance tells them not to shoot him and asks them if they are still caught in the game, then the movie ends.

There are many points about eXistenZ worth analyzing in more detail. For instance the fanaticism of gamers being caught up in their own worlds and losing touch with reality is probably the most obvious. Then there are the different attitudes towards technology and the roles they play for gender construction. It is noticeable that Cronenberg breaks with the classical norms: the men are fearsome, violent, and technophobic and fighting that what they don't understand, while the women are "future-oriented", technophile, which is not traditionally associated with classical gender roles. Cronenberg's future vision is not a shiny one with a modern outlook, instead it is one where the organic melts together with the inorganic, producing disturbing images of this crossover.

Both movies I have just discussed contain similar basic ideas:

> A scathing satire on advanced gaming technology, *eXistenZ* and *Videodrome* reflect techno-anxieties about the literal penetration of entertainment and media technologies into our bodies, our nervous systems, our lives. While not completely embracing the flesh, Cronenberg expresses the horrific side of our passive slide into cyborgism and technological enslavement (Dinello 2005:171).

Both movies reflect male´s anxieties of the penetration of the flesh by an exterior force, thus feminizing the male´s body. In *Videodrome*, Renn has grown a new organ through which he can be penetrated, while in eXistenZ, Pikul has a hole in his spine, which serves a similar purpose.

IV.Metalmorphosis

The transformation of the body into something new, a posthuman being, and the change of personality experienced by the "victim", the fear for the loss of control is a central motif in both of Cronenberg's movies. Several critics and scientists have described these new emerging bodies as grotesque bodies (e.g. Papenburg 2007). Criscery-Ronay gives a definition for the grotesque as an embodied physical anomaly, whose existence can't be explained by rational science (2002: 84). And further on writes that "with the grotesque, awareness is turned in toward physicality and presence, contingency and change, with the added problem that it may actually change the thing being observed and implicate consciousness in the mutations of the object" (2002: 85).

Tetsuo Iron Man is another cyberpunk classic which also transgresses the boundaries between the two genres leaving us with a disturbing movie and various grotesque bodies, sharing similarities with the bodies in Cronenberg movies. *Tetsuo Iron Man* (Tsukamoto 1988), which also discusses Cronenberg central theme of penetration of the flesh and the occurring transformations, is filmed in a surrealistic fashion, making the viewer familiar with Buñuel and Dali remember the style of *Un Chien Andalou* (1929).

In *Tetsuo,* a metal fetishist penetrates his flesh with a shard of metal, shoving it into his hand. The metal starts growing together with him. Metal starts to sprout

from under his skin. After an accident with a businessman the metal infects the latter in the same way. The businessman, while turning to metal, murders a woman with his metal-drill-phallus grinding her to death after having a nightmare of a woman raping him with a metal tentacle coming from her vagina. Then he searches for the metal fetishist, with whom he has a showdown, racing on their feet through downtown Tokyo. After the race the two men have become one. "An AIDS allegory, a parody of man/machine hyper-violence, and a brutal horror story about the infection of cyborgization, *Iron Man* denounces runaway technology and [...] follows the cultural logic of body modification and posthuman transformation to their literal and grotesque conclusion" (Dinello 2005: 133). Bukatman describes *Tetsuo* as "an impressive (and happily unpleasant) work of techno-surrealism" (1990: 308). And further writes that the fusing of man and machine does not have a liberating effect and does not dissolve any boundaries, but instead rather reseats the male subject position of virile power and control, showing the anxieties of men against women (1990: 308). The main idea behind Tetsuo is in Dinello's opinion emphasizing the cyborg as a tormented, clanking metal behemoth rather than a confident macho man-machine ideal, expressing how the techno-metamorphosis from man into cyborg turns flesh into a weapon (2005: 135). But not only does the imagery of Tetsuo have a disturbing effect on the viewer. The sounds and the music are industrial, alienating the viewer from the happening on screen. During the course of the movie "the voice of the protagonist becomes increasingly mechanized as he loses his humanity and becomes closer to a machine, reflecting the dehumanization central to cyberpunk and industrial's basic philosophy (Collins 2005: 173)".

The second instalment of Tetsuo, *Tetsuo Body Hammer*, differs from the first, although it is rather a remake than a continuation, with its focus on becoming a human weapon. The arm of the main character transforms at first into a giant gun, before the whole body becomes a weapon. "Less concerned than *Iron Man* with the sexual implications of metal fetishism, *Body Hammer* visually elaborates the idea that the mechanization of a human being can be a source of vengeful power but requires total dehumanization" (Dinello 2005: 134). The name Tetsuo is a reference to another anime cyberpunk classic *Aikra*[20] (1988), in which one of the main characters, Tetsuo, mutates losing control over his body and grows together with inorganic material

[20] *Akira* was the first full length anime movie to be shown in European cinemas. It can be considered to be the initial spark igniting the international euphoria for mangas.

during the showdown scene.

All of these movies share a common ending with no return to the “old flesh”, or what is defined in cyberpunk as the “meat”, the human body, which becomes obsolete in its former “version”. Tsukamoto fuses man with man and metal into a new life-form, assimilating everything they pass on their way, covering the world beneath entirely in metal. Cronenberg’s movie are very satirical and often a direct attack on our norms and gender thinking. Tsukamoto’s movies are more apocalyptic. But like mentioned above, both put their main focus on the destruction of the body, which occurs at the end.

5.The X-Factor - Mutants & Superheroes

In addition to movies and novels, comics have also been featuring representations of the posthuman in many ways and from early on. Cyborgs, robots, androids, superheroes, super-villains and others have been filling papers of comics and graphic novels from the USA to Europe to Japan (as clearly illustrated in chapter 2 above), even often dealing with actual contemporary or social issues.

> As part of our culture, comic books (and the industry itself) present a number of social phenomena, including gender, race, and sexual inequality or stratification, and violence. Intentionally or unintentionally, superhero books also reflect cultural assumptions about gender and American values (e.g. individualism) (Hall&Lucal 1991: 61).

The influence and topics of comics has often been neglected by scholars in the last decades, since in their view comics were a pulp genre with no value. Ever since Alan Moore's *Watchmen* became one of the top SF novels of the 20th century, there has been a shift in the perception of comics, now suddenly being considered as adult entertainment. There are comics dealing more or less with any topic, but SF is probably the biggest genre amongst comics written.

Popular cyborg figures in comics are *Robocop, Terminator* and Marvel's first black skinned cyborg *Deathlok*[21]. On the cover of the first issue of *Deathlok* there is a clear reference to *Terminator*, with half of the face exposing the metal beneath the skin. Interestingly Deathlok fuses issues of racism with cyborg matters. Being black is viewed as much as being a cyborg, a construction. As Riviera writes, "Deathlok re-imagines blackness as a complex, diasporic cultural production, not an essential or naturalized, or fixed identity" (Rivera 2007: 108). And in addition to the figure of *Deathlok*, LeiLani Nishime analyzes the concept of the mulatto cyborg and what it stands for, comparing the mulatto cyborg with Gloria Anzaldua's idea of the *new mestiza*[22] (2005), a new hybrid culture. The mulatto cyborg and the *new mestiza* are

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[21] Deathlok's first appearance was in 1974 as Manning in Astonishing Tales. In 1990 the character received its own 4-part mini-series. While the first Deathlok was an US-Soldier transformed into a cyborg, the second Deathlok is an African-American scientist and pacifist, who had his brain against his will transplanted into a cyborg created by the military.

[22] Anzaldua, Gloria M., *Borderlands/La Frontera-The new mestiza* , San Francisco: AuntLuteBooks, 1999.

boundary violations, transgressing fixed norms. “Ultimately, it is the mulatto cyborg, chaotic, ironic, without nostalgia or origin that promises a future of mixed-race subjectivity” (Nishime 2005: 47).

Before I take a look at posthuman superheroes, I will shortly discuss *Batman*, who is a very special case in the world of superheroes. He does not have any superpowers or special abilities. He is a “normal” human through and through, but with the help of technological devices, he becomes the superhero. There are clear distinctions between Batman aka Bruce Wayne and “ordinary” humans. One is his access to extreme wealth, enabling him to carry out his actions as well as develop the weapons and tools needed. One can discern the stark similarities with Iron Man aka Tony Stark, who is also a billionaire, but in comparison to Bruce Wayne he is not able to live without his technological inventions. Furthermore, he is not as ordinary as others, possessing extreme intelligence and extreme physical abilities. Batman is an example of self-perfection, propagated by transhuman thinkers, e.g. Max More and Hans Moravec. Even though he is “normal”, he stands above the masses of people. He has reached a condition of perfection which man can achieve in our world and in nature, and tries to experience his true potential as a human being. In order to achieve this condition, he has to work out and do a great deal of training, requiring a lot of self-discipline. Bruce Wayne can be considered a transhumanist, but not yet transhuman. He is a “perfected” man.

> Bruce Wayne as Batman is the best of the best of humanity, yet he is only human. He represents the human condition, maxed out to its perfect form. He is a superhero and a transhumanist, but he is unable to become transhumant. He is super in his impossible maxing out of human potential, and transhumanist in his self-made effort to move beyond any limits he can. Batman thus represents humanity´s current stage (Munkittrick 2010).

The category of the mutants, in which the DNA has undergone a change leading mostly to enhanced abilities of the character, is often bordering on the category of the cyborg, a “hybrid” being; many heroes or villains can be put into several of the following categories, so a clear definition of the character is not often easy. Mutants have become an extremely attractive subject in present times. “Contemporary culture has shifted the issue of genetic mutations from the high-tech

laboratories into popular culture" (Braidotti 2002: 179). Whether or what were the origins of the change, and if they were natural or engineered evolution, we do not often know, since they aren't presented in many cases.

Mark Oehlert distinguishes between three different types of cyborg/mutants using Chris Hables-Gray's distinctions between the cyborg classes: first, there is the controller e.g. *Wolverine, Omega Red* and *Iron Man*. The controller has a cyborg component implanted into his system and is able to use these modifications through mind and will. The problem with *Wolverin*e, although he is put into this class of cyborgs, is that in a later issue he is stripped off his admantium[23] skeleton, which leaves his real skeletal structure exposed, showing that his blades in the fist were not implanted, but are made of his own bone, meaning that he was born as a mutant and not created by the military after all in the *Weapon X* program. Jean Gray mentions this in the first movie:"The metal is an alloy called admantium, supposedly indestructible. It´s been surgically grafted to his entire skeleton." She mentions further, that Wolverine was only able to survive this procedure due to his extraordinary healing skills.

Probably the best example for a controller though, is *IronMan*, the wealthy industrial boss Tony Stark, who not only controls a cyborg suit, but has become a hybrid himself, depending on technology to keep him living, since he was fatally wounded in the heart in the beginning of his story.

Secondly, we have the bio-tech integrators which are very extraordinary, e.g. *Cable*. Their abilities are not often explained and their cyborg system cannot be removed since it is a part of them; "the relationship between Cable and his cybernetic system is a more intimate and symbiotic one than exists for the class of controller cyborgs", as Oehlert puts it (1995: 224). Anytime needed the bio-tech integrator can use his abilities through will power, offering a wide range of useful skills and abilities.

Lastly, there are the genetic cyborgs, e.g. *Captain America, Spiderman* and *Hulk* (Oehlert 1995: 222). This last class of cyborgs is what we commonly understand as mutants. Instead of using prosthesis and implants, their DNA has been modified leaving the heroes or villains with extraordinary powers which common human does not possess. Often these changes happen through accidents as with *Spiderman*, who is bitten by a radioactive contaminated spider, which cause the change from Peter Parker

[23] Admantium is a fictional metal in the Marvel World. It is unbreakable and extremely hard.

to Spiderman or the *Hulk,* a brilliant scientist who is exposed to gamma-waves, which turn him into a type of Dr.Jekyll and Mr.Hyde character. If he becomes enraged he becomes the unstoppable and menacing *Hulk*. Although Spiderman and Hulk are genetically modified for the better or the worse, they are still limited to human "flaws", such as getting ill or eventually dying.

Captain America is the typical example of the military turning humans into cyborgs for their own purposes. Steve Rogers, a puny and "unmanly" man, has the wish to serve the U.S. Army in the fight against fascist Germany and communist Russia and thus becomes a human guinea pig for the army testing out a new product, which alters Steve Rogers's abilities and turns him into the invincible Captain America. His arch-villain, the Red Skull, is a crude mixture of a communist and fascist. Probably, Captain America was the Marvel comic with the heaviest patriotic undertone and the most politicized mainstream comic-character - a posthuman soldier to combat the "red wave". In the analogy of the Marvel universe, Captain America is the first genetically modified soldier of a military project, which is in analogy with the creation of Wolverine in "Weapon X".

> The experience/success of these posthuman superheroes is attached to a masculine potency that is achieved by possession, use and manipulation of technology. The heroes' various material apparatuses exist as an extension to their physical bodies. More specifically, what we have is the attachment of masculinity to consumer items, particularly technology (Cook 2009: 48).

Even, if we have a wide range of characters, the comics mainly appeal to a male readership (and were mainly drawn for a white male audience, except for *Deathlok*, who was directed at a black readership).

The Marvel Universe reproduces the basic ideas over and over again, rewriting, reinventing their own heroes. The similarities between the characters are precise, since the different concepts of superpowers have influenced writers throughout the decades, leading to similar characters being created, as can be seen with the examples of *Wolverine* and *Ripclaw.* (See Appendix Fig.II.2.1 and Fig.II.2.2 P.65 for comparison).

I.X-Men: Movies and Comics

Next to *Spiderman* probably one of the most successful Marvel comic is the *X-Men*, from which three movies have been made followed by several spin-offs of its characters, most notably *Wolverine*, who enjoys huge popularity amongst the readers and viewers of *X-Men*. X-Men, at first created for young readers, dealt with the topics of racism, sexism and further forms of oppression and exclusion. The X-Men are different to mutants like Spiderman, who becomes one by accident. The X-Men are born with their abilities. Many TV cartoon series, and in the meantime a Japanese anime[24], have been made. The X-Men have been ongoing since four decades, which makes their universe very complex and due to the amount of different writers involved in the series, there are many contradictions in the characters and storylines. In comparison to *JLA*[25], a DC comic, featuring also a group of superheroes, who fight of danger and threats to the USA and Image's *Cyberforce,* with its hyper-masculine combat-happy superheroes (Burt 2005: 175) (see appendix Fig.II.3.1 and Fig.II.3.2 P.66), e.g. *Ripclaw* who is a direct copy of *Wolverine* with his claws and his battle fury, X-Men takes a more psychological approach to the characters reasons and motivations and the problems they face in and with society..

> The primary concern of the JLA is to save humanity from disasters and to fight off those that come looking for a fight. The X-Men live in a world where the evolutionary process has put mankind face to face with its replacement, the super-powered mutants (Klock 2003).

A shift towards posthuman questions is visible here. X-Men works against reductive definitions as with the *Image*[26] heroes, who a merely reduced to muscle and style. The X-Men are not just an idealized "battle unit", but offer an alternative utopian society (Burt 2005: 175). The comics and movies differ from each other in certain aspects and representations of characters. Since the new millennia there has been a new wave of many comic writers, most notably Mark Millar, who has been busy rewriting the entire Marvel universe with the *Ultimate*-series. Millar's *Ultimates* are a radical

[24] Marvel has four different TV-mini-series produced by the japanese anime company Madhouse. The cartoons inculde *X-Men, IronMan, Blade* and *Wolverine*. http://www.animax.co.jp/marvelanime/
[25] Justice League America
[26] Another big comic company founded by Todd McFarlane, the creator of *Spawn.* Image focuses on adult-entertainment. They show more violence than in the Marvel Universe.

revisioning of the most classical Marvel heroes. Klock writes that Millar's posthumanism offers a very pessimistic outlook of the future with rather ambiguous heroes than clear cut ones. Millar's Xavier does not only help people, but instead abuses his powers for his own personal goals. "Posthumanism in Xavier [...] dangerously verges on something unsympathetic (the merely human reader is, of course, aligned with those "ape men" mutants have come to replace)" (Klock 2003). The mutants, frustrated by experiencing discrimination, are starting to develop in the same direction.

The most striking point with X-Men is that we are presented with different ideas of posthumanism, than that which I have touched upon in my preceding chapters - a posthuman pluralism. We do not have the alteration of the body through genetic engineering (not even with Weapon X, since they use mutants for their experiments), nor are we presented with any forms of prosthesis in this case except for Cyclops, who needs his eye-device to keep his deadly beams under control). Instead, we are confronted with a wide variety of mutants, who raise questions about our posthuman future. From the sixties until now there has been a change in the portrayal of the main characters. While in the past there was a positive approach to the posthuman issue, contemporary times have changed the premises, especially with Mark Millar, who I mentioned above. Because Mark Millar and Adam Kubert's Ultimate X-Men and the movies exist outside of the continuity of X-Men, readers do not have to be familiar with more than forty years of the X-Men universe in order to understand what is happening.

X-Men is the story of a group of extraordinary mutants, led by the wise Dr. Charles Xavier, a powerful telepath struggling for the peaceful coexistence between mutants and humans. Since humans are afraid of losing their dominance to the mutants, conflict is bound to happen, as observed when the movie starts with a quote by Charles Xavier:

> Mutation. It is the key to our evolution. It is how we evolved from a single-celled into the dominant species on the planet. This process is slow, taking normally thousands and thousands of years, But every few hundred millennia, evolution leaps forward (Singer 2000).

Not only does this quote introduce us to the main idea of the story of genetic evolution, but also hints at the question of hierarchies and dominance in the world. This is clearly illustrated by the evil mutants surrounding Magneto who believe it is their destiny to overcome mankind and prevail as the new species on Earth. The central struggle is between the leading characters: Magneto and Xavier, who were once former friends with utopian visions. Magneto aka Eric Lehnsherr is a survivor of the Holocaust and because of his trauma lost faith in the notion of peace between humans and mutants, shifting his goals towards the subjugation of man to the mutants. To achieve these goals, he gathers a group of "evil" mutants around him, who see their personal role in the domination of the *Homo Sapiens*, since they consider themselves *Homo Superior*, to use Magneto's words. Magneto has turned into the fascist minded *Übermensch*, viewing humans on the edge of extinction and the mutants rightfully claiming their role as the new dominating species on Earth. His pessimistic beliefs result from the idea that integration of the other is not possible. Magneto describes the human beings as parasites living off of the resources meant for the mutants. Magneto is constantly declaring war on humans, claiming that war between humans and mutants is unpreventable; and history has shown that the dominant species survives, while the weaker become extinct.

The X-Men, living on the margins of society, are being alienated by the ordinary humans for their looks or special abilities. The former have to struggle to maintain peace and not to fight the humans, although the mutants are treated badly by the "real" humans. "The anti-mutant sentiment in X-Men titles easily corresponds to institutional and everyday racism, (hetero-)sexism, homophobia[27], and anti-Semitism" (Hall&Lucal 1999: 63). Charles Xavier, their leader, is physically handicapped and bound to the wheel-chair. Since he is the most powerful telepath, the bodily restrictions do not hinder him in his actions. Stan Lee and Jack Kirby, the creators of X-Men, were influenced by the civil rights movements and Martin Luther King, the charismatic leader of the movement. Charles Xavier should represent his personality, charisma and humanistic values. Hall and Lucan further write, that *X-Men* "demonstrates the politics of separatism and assimilation as various mutant

[27] Comic-writers were often concerned with the problems of marginalized groups. Many American authors had a Jewish background and came to the U.S. to avoid the Holocaust. In Europe, Alan Moore set up the AARGH-Artists Against Rampant Government Homophobia in England in 1988 to raise awareness against the Local Government Act, banning homosexuals from all public services.

leaders try to find solutions to the hatred and ignorance of "normal" human beings" (1999: 63). Xavier is the counterpart to Magneto; both of them intelligent, charismatic leaders, but one believing in integration and the other in domination. While in the movie Xavier is presented as a heartily father figure, Millar introduces a more sinister side to Xavier, aware of his posthuman condition, knowing the mutants to be ahead of humans in the evolutionary process (Klock 2003).

The most popular figure in the series is Wolverine, not due to the depth of his character[28] but for the unleashed and uncontrollable anger, bringing very violent justice to those who apparently deserve it. Wolverine is a very ambivalent character, always falling back into his old behavioural ways, which often makes him a menace to his own "people". Wolverine had been created as a weapon by the humans, which they can use against the mutant threat. The Weapon X project is described by Millar as "the antithesis of the X-Men in every way" (Millar 2001: 2). Weapon X exploits the mutants, turning them into violent beings. Weapon X sees their only value as being living weapons. Weapon X does not promote a peaceful solution between humans and mutants. Wolverine himself is not aware of his mutant past, but thinks of himself more as a cyborg, as a military creation. Although he is a mutant, his posthuman side is only revealed when he shows his claws; the rest of the time he reminds the reader of a mixture of a rockabilly, with his sideburns, and Canadian hunter; a real macho character. The rawness of his aura makes him also charismatic, but all in all his actions are mostly violent.

Another interesting character of the X-Men, although no lead character, is Mystique, who gained more attention in the movie adaptations. Mystique, a shape-shifter, is similar in her/its potential powers to the "Liquid Metal Man" of *Terminator 2,* who "seems neither a product of human technology nor subject to physical law. "He is the monster of some diabolically other Nature" (Larson 1997:62). The concept of morphing, "taps into our own sense of being a subject in flux" (Toffoletti 2007: 102). Because she/it is anamorphous she/it poses a threat to the notion of being human, since she/it can adopt any organic or inorganic shape, which also allows it to transgress gender boundaries (Herbrechter 2009: 106). The latter can also be applied to Mystique. Mystique does not have a definite gender (although portrayed as a woman in comic and movie), and no background story as the only X-Men character.

[28] A background story of Wolverine's origins was presented for the first time in the movie *Wolverine: Origins* - as the title already says. Until then, his exact past and childhood had never been revealed.

The character does not contain any depth to its personality or anything "human" we can relate to. Mystique transgresses the definition of human, clearly becoming a posthuman subject (MtM 2011). As Braidotti writes, she might not be a she, but rather a developing subject, the other amongst the others, "a post-Woman embodied subject cast in female morphology who has already undergone an essential metamorphosis" (2002: 11). Something like this raises anxieties about our definitions. Can they be upkept? The shapeshifter poses a threat to the human being in the same way the anamorphous "Liquid Metal Man" from *Terminator 2* does. It is faceless and without identity, and therefore without mother. The shape-shifter's identity is fragile, because it possesses multiple personalities to choose from, offering other ways of living; a postmodern subject embracing thousands of possibilities (MtM 2011). Furthermore, the shape-shifter does not live according to the time we live in, since she/it does not have a definite age. And she does not fit in any of our categories, being able to change her gender and cross boundaries. Braidotti again writes, that "the nomadic or intensive horizon is a subjectivity 'beyond gender' in the sense of being dispersed, not binary, multiple, not dualistic, interconnected, not dialectic and in constant flux, not fixed" (Braidotti 2002: 80). The nomadic subject is constantly on the move of becoming, but never reaches there, since it is constantly redefining its own subjectivity. The nomadic subject is flows of transformations without any final destination; it is a form of intransitive becoming (Braidotti 2002: 86). Mystique is a nomadic subject. She/it is always on the move. She/it does not possess a clear shape or form, by which we define ourselves. Her/its body becomes dubious. We never accept her/it as a final subject, since she/it always alters her/its appearance and therefore, who or what she/it is.

Although being genderless, she is given a female lover Destiny in the comics, which the reader does recognize as a lesbian relationship, since Mystique is feminized throughout the movies and comics. The lesbian relationship confronts once again the heterosexual norms of society. In the movie she is most times naked, although her genitals and nipples are covered in scales. Mystique remains an ambiguous figure, which makes her actions not seem very clear to the reader/viewer - she is neither good, nor bad.

Another posthuman mutant in the series is Jean Grey, who has similar powers to Xavier. In the third movie, the omnipotent and almost "divine" creature, the Phoenix awakens in Jean Grey. The Phoenix is an entity, which does not have clear

bodily boundaries. Possessing telepathic and telekinetic abilities it is able to feel everything around it and control them. It is able to fuse with its surroundings and other people. An example is given: "When Xavier touches a fork Jean is levitating with her mind in mid-air, Jean can feel Xavier's pulse through the fork. Again in a posthuman idea, Jean's consciousness extends beyond her body into the fork and surrounding environment, effectively exemplifying that she is embedded as part of that environment" (MtM 2011). Unfortunately, Phoenix is not presented clearly who or what it is, in the movie. After the Phoenix has risen it starts to destroy its entire surrounding and only Wolverine, with his ability to cure himself, is able to stop Phoenix from destroying the world, like it did to many others. Klock states:

> The Phoenix is alien in every sense (including extra-terrestrial): it is eternal, outside space and time, and has no regard for individuals or any part of the created universe. This is the central problem: the Phoenix is a negative endpoint -- the dark idea that will eventually be produced by evolution's violent progress from Human to Posthuman and beyond -- not a progressive Posthuman utopia, but something completely alien and inhuman that will destroy us all (2003).

The Phoenix is probably the most powerful figure, the highest force ever created in the Marvel world. The Phoenix is as mighty as God. In this context, Klock compares the ideas of the posthuman to Gnosticism, which he considers a deeply pessimistic religion with its notion that the world is a prison, and although it might be our destiny to evolve into something different that human, it is also a step into a dark future, in which we might become destroyed or more advanced in the fields of torture, humiliation and cruelty (Klock 2003).

II. Variations of Heroes

Superheroes and mutants offer us a different perspective on posthumanism. While in many SF novels the posthuman is often presented as a threat, in the world of comics we normally take position with the posthumans. The posthumans are normally sympathetic and mostly charismatic, but the "normal" humans are caught in their prejudices and usually discriminating the "other", which threatens the purity of the "human community". Since there are a wide variety of categories under which we place the superheroes, it is difficult to define certain characters as transhumans or transhumanist or even posthumans. Mark Miller shifted the content towards a more

pessimistic standpoint, noting that posthumans will always be on the battleground against ordinary humans.

The imagery presented in comics and in graphic novels should be taken serious, since they have a large influence on SF novels and cinema in the meantime. Marvel has set up its own movie studios in order to transfer their characters from paper to celluloid. Superheroes and villains are attractive to audiences; this year many more big Hollywood adaptations e.g. *Green Lantern*, *Captain America* will hit the big screen. In a time, in which the talk about DNA dominates the scientific discourse the cyborg is not any longer fashionable for cinema - the superhero and mutant is.

6.Science Fiction and Reality: Transhumanists & Art

As we have seen in the preceding chapters, there are many different visions of the posthuman future. Cyborgs, VR, mutants and freaks offer interesting perspectives; they might differ from pessimistic and negative to positive notions. Much of SF literature and cinema has influenced our lives: the possibilities of wireless communication and the digital age have made us change our view of the world and ourselves. There are many movements, especially the transhumanist branch, which mixes and takes ideas from SF novels and science. "SF, then, is not a genre of literary entertainment only, but a mode of awareness, a complex relationship between imaginary conceptions and historical reality unfolding into the future" (Criscery-Ronay 1991:38). Max More, one of the leading figures of posthuman visionaries, offers a list of SF novels for those interested in transhumanism (Vint 2008: 181). Gibson's visions of disembodiment in *Neuromancer* seem until now to have a strong influence of the view of immortality through being digitally uploaded.

Interestingly, many of the key thinkers have not originated from social sciences and humanism, but are mostly mathematicians, physicists, and robot and computer experts. The human is viewed as a machine or a pattern of information; natural sciences are used to explain complex issues concerning humans, reducing the perception of humans to mind, which controls, and the body, the vehicle of the mind. Social questions in order of defining structures which influence people's lives are often ignored or not understood. Vint further describes their views "Like the self-made man of liberal humanism, Extropians efface the operation of social structures to position social subjects in different relations of power" (2008: 177).

Besides the transhumanists, ideas connected to becoming a cyborg have also influenced the world of art with its prime example, Stelarc. The connection between machines/science and humans is one of his central themes.

> Zwischen Kunst und Wissenschaft werden in der gegenwärtigen Phase des menschlichen "*logos*" neue Verbindungen möglich, insbesondere im Bereich der "Performance" oder des "ästhetischen) Experiments, die die Einbeziehung von Technologie in die Gegenwartskunst sowohl thematisch als auch ästhetisch-formal begünstigt (Herbrechter 2009:33).

I. Transhumanist movements and thinkers

In the following I am taking a brief look at the transhumanist movements, their basic ideas and link these to motifs of SF novels, with a further look taken at the three key thinkers of transhumanism.

Max More:

Max More is an Extropian, who believes we can achieve a posthuman status through self-improvement eventually leading to self-transformation, ideas related to the core principles of liberal humanism. More was born in Bristol and received his Ph.D. in politics, philosophy and economics. He is probably the leading figure of the Extropians. Max More was also the founder of the Extropy Institute in California, researching possibilities of transhumanism. The Extropy Institute can be considered a transhumanist ideological "think-tank". But first, what are the Extropians?

The Extropians want to achieve immortality. Human existence is not considered perfect and the human body has to be modified for future survival. Until the technologies are developed, which will grant immortality, the bodies of the members are cyropreserved after death or if they are incurably ill. A basic problem though is keeping the number of members together for the future, for the fear that no one besides themselves will show interest in their resurrection. Pepperell describes their basic views "as an optimistic belief in the power of technology to transform, for the better, that which we know now as human existence. Extropy is the opposite of entropy, the pessimistic principle that the entire universe is decaying into chaos" (2003: 170). The Extropians want to achieve a posthuman form of existence and therefore advocate their notion of transhumanism. Max More describes his transhumanist philosophy as "philosophies of life that seek continuation and acceleration of the evolution of intelligent life beyond its currently human form and limits by means of science and technology, guided by life-promoting principles and values, while avoiding religion and dogma" (Pepperell 2003: 170). As we can see, the Extropians position is extremely techno-oriented.

In the appendix I have added the *Transhumanist Declaration* written by Max More, his wife and several transhumanist companions (see appendix: Fig.I.1, P.63).

Hans Moravec:

In the preceding chapters I have often mentioned Moravec without taking a deeper look at who he is. Moravec, born 1948 in Austria, built his first robot at an early age. His parents migrated to Canada, where studied and worked in several laboratories researching robot technologies. He received his Ph.D. in philosophy, 1980 at Stanford University. A short time later he published *Mind Children. The future of Robot and Human Intelligence* (1988), which made him one of the founders of a posthuman philosophy. He had been strongly influenced by Isaac Asimov's ideas of robots and the three *robot laws*. He strongly believes that Artificial Intelligence will replace humans one day, probably in the next thirty years as he claims. He is constantly repeating his message since several decades now. Moravec's ideas have been rejected by the world of AI-researchers, since he is merely a robot-designer and scientist, and not concerned with the development of AI's (Krüger 2004: 118).

Ray Kurzweil:

Raymond Kurzweil, who also was born in 1948, is a computer engineer. He is a successful entrepreneur establishing six computer companies and inventing many electronic gadgets, like the innovative *Xerox*-reading machine, which can turn written texts into speech. For the transhumanist movements his book *The Age of Spiritual Machines: When Computers exceed Human Intelligence* (1999) is of major importance. Kurzweil shares a similar position with Moravec, believing that AI's will eventually succeed humans one day and develop a higher form of intelligence. Humans will become the "nanny" helping with the "birth" and development of the AI's - the next step of evolution (Herbrechter 2009: 48).

All individuals mentioned above share a similar idea that humans will gain a certain form of transcendence through digital technology. Disembodiment and life in VR are once again in the tradition of Descartes and establish a hierarchy of the value of body parts. Although many may not be religious in their standpoints, as with Max More, who takes a strong position against religion in his writings, their perception of human nature and the possibilities of immortality seem to have a certain religious undertone.

II.Cyborg Artist: Stelarc

I am taking a brief look at Stelarc and his work to show that cyborgization is not only limited to either the military and industry or literature and movies. Stelarc is a performance and media artist from Australia, who is fascinated by the possibilities robotics, VR, and other technologies offer for the exploration of the idea of the interface for the creation of art. From his performances in the seventies to his performances in the eighties there was a significant shift.

> Stelarc's fascination with challenging the physical parameters of the body and interrogating the limits of its capabilities was evidenced in his early body suspension performances of the seventies. But it is in later performances that Stelarc explores the ideas of bodily extension and enhancement in the context of electronic culture and digital communication networks. Rather than enacting the loss of the body into technology and media systems, Stelarc's performances suggest that a new kind of corporeality is created in the mix of biological and information systems (Toffoletti 2007:126).

Probably, one of his key examples of the fusion between human and machine and the art resulting from this unification is the robot arm he had attached to his own arm, copying all the movements he made with his real arm. The performance was called "handwriting" (see appendix Fig.II.5 P.69). The robot arm, the "third hand", was carrying a pen and drew independent to the movements of the real arms. All hands together wrote the word: EVOLUTION. The third hand was activated by pulse signals, which are sent from his abdominal and leg muscles through electronic wires into the hand, making the wires and hand become a part of the artist´s body circuitry (Toffoletti 2007: 126) Another famous performance he carried out was to find out the effects of gravity on the bodily limits and boundaries. Stelarc had ropes and wires directly installed into his body, which was hanging from the ropes in the free room. Stelarc is constantly experimenting with the interfaces between body and technology and how these experiences will alter our perception of reality and change the art we create. Stelarc works together with scientist from many different fields for his experimental performances. Internationally he gives lectures and takes part in conferences dealing with posthumanism. Using the concepts of the cyborg, we can consider Stelarc the first official *cyborg artist*.

7.Conclusion

Are we already posthuman? Is mankind on the edge of extinction? Are we losing control of our own technological creations and which way will they become a part of our life?

Science-Fiction often portrays a dark dystopian negative future, in which the author takes a critical standpoint, which should not be ignored or neglected by other thinkers. The destruction of civilization, the loss of the body, lead directly to the question: how and through what is human identity defined? They are often very radical approaches and one might think about these sources being too pessimistic. Taking a look at the newspapers and at recent developments, and going further beyond the surface, will take us eventually there where the Science-Fictions novels with their content have already arrived. We are embracing the evolution of Internet and even if we might not become cyborgs or live in a matrix, the cyber-world does construct new identities of real human beings who mainly live actively between the borders of Internet and the material world. Network sites e.g. MySpace, Facebook etc. can be seen as perfect examples how people create a new identity through which they connect to other people in digital form. Taking this further are games as “World of Warcraft” or “The Sims”, where the players spend days, weeks and some nearly their whole life in the cyberspace. Fascinating is that the ego of many players becomes linked to the success and fame their character has in the game. They define themselves through their characters identity. Are they the “perfect people” for the matrix? Are we already in the phase of posthumanism?

Our striving for new technologies does not mean to place technology over human beings and establish another ideological hierarchy. The euphoria for technology can be seen mostly in industry and late capitalism, which are only profit-oriented; to quote Tyrell from BladeRunner one last time: “Commerce”. The basic thoughts on how to deal with these developments are negotiated in contemporary times nearly every day in the cultural sections of newspapers and society itself, although not ending in such a negative way like many of the discussed pieces of fiction.

Humans have always been changing since the beginning of time and have always tried to survive in their environment making humans invent tools or other

gadgets, in order to simplify certain procedures and make life more comfortable. Evolution is a process which never ends. Our appearances have changed in the last centuries, as we have grown taller through a change in our diets and the advancements in the fields of medical research. Technology can never be separated from humans, since there is the necessity of its use in order to survive. As I have mentioned with the example of Stephen Hawkings, that without the aid of technology he probably would not be able to live and communicate in his environment. And nobody would speak out loud and neglect him from being fully human.

I do not believe that we have become cyborgs, but rather we should accept the fact, that the "purity" of the human community has always been infiltrated by exterior forces, which maybe have been considered evil or detrimental by certain groups in society. And who really is part of this human community? We should not work with a metaphysical aspect in judging ourselves and other people; especially, the others we needed in the past to construct the subject in Western philosophy. There is no such thing as purity of our body or mind, which is bordering on a religious perception of the world. The idea of transcendence and metaphysics separate the human parts from each other and establishes a hierarchy of the body, with the head, and its brain, where apparently the mind is seated at its center. We rather need a holistic perception of humans, as many materialist thinkers argue. Our environment, our bodily experiences, and our interactions with other humans, animals, and technology all add together to the human beings we are. If we would reject the body and live in the cyberspace, would we still be the humans we believed ourselves to be? What are we to make of our sexuality than, which at the basis has a big influence on our subconciousness? How would our perception of the world change?

All of these questions cannot be answered, for no one can foresee the future and only can look at contemporary developments and how humans engage with them, but much of those ideas will still remain SF visions, with no real meaning for our lives, even if permanently new technologies are being developed. There are many existing problems concerning these technologies. Who has access in order to manipulate their own body?

And another central question always of our Western culture is: Who will finance it? If there are no profits to be made, will posthuman existences be of interest? The only people embracing these possibilities are the transhumanist movements, who do have a certain influence on the discussion of posthumanism, but no big impact on

society.

We need a critical posthumanism to confront and overcome old notions of humanity. The white, civilized Western male subject is not anymore at the center of the world. Postmodern times have proven that there are many different cultures and people; and poststructuralist thinkers, like Judith Butler, have shown that gender is a performative act. We can always construct ourselves new and have multiple identities we are able to choose from, as with the nomadic subject: we are always on the move of becoming without ever reaching the final destination; which probably does not exist and if, what should it be? We have to learn to accept alternative forms of being and living; we have to overcome the hierarchies man has introduced to the world, placing animals, technology, females, and other races beneath him. Critical posthumanism tries to deconstruct the norms society has introduced and offer alternatives, which also means progress; progress for the people, who have been excluded from being a subject, and were turned into objects. The critical posthumanism we need is a discourse on the conservative values of Western thinking, deconstructing and reconstructing and pathing the way for a more tolerant future. No matter, how we will look in the future, we are all part of and living in this world. The 'post' in posthumanism does not mean a post-biological embodiment, but the 'post' should represent the "real" heritage of humanism. Thus, the 'post' becomes our starting point.

Appendix:

I.The Transhumanist Declaration:

1.Humanity stands to be profoundly affected by science and technology in the future.
We envision the possibility of broadening human potential by overcoming aging, cognitive shortcomings, involuntary suffering, and our confinement to planet Earth.

2.We believe that humanity's potential is still mostly unrealized.
There are possible scenarios that lead to wonderful and exceedingly worthwhile enhanced human conditions.

3.We recognize that humanity faces serious risks, especially from the misuse of new technologies.
There are possible realistic scenarios that lead to the loss of most, or even all, of what we hold valuable. Some of these scenarios are drastic, others are subtle.
Although all progress is change, not all change is progress.

4.Research effort needs to be invested into understanding these prospects. We need to carefully deliberate how best to reduce risks and expedite beneficial applications.
We also need forums where people can constructively discuss what should be done, and a social order where responsible decisions can be implemented.

5.Reduction of existential risks, and development of means for the preservation of life and health, the alleviation of grave suffering,
and the improvement of human foresight and wisdom should be pursued as urgent priorities, and heavily funded.

6.Policy making ought to be guided by responsible and inclusive moral vision, taking seriously both opportunities and risks,
respecting autonomy and individual rights, and showing solidarity with and concern for the interests and dignity of all people around the globe.
We must also consider our moral responsibilities towards generations that will exist in the future.

7.We advocate the well-being of all sentience, including humans, non-human animals, and any future artificial intellects,
modified life forms, or other intelligences to which technological and scientific advance may give rise.

8.We favour allowing individuals wide personal choice over how they enable their lives.
This includes use of techniques that may be developed to assist memory, concentration, and mental energy;
life extension therapies; reproductive choice technologies; cryonics procedures; and many other possible human modification and enhancement technologies.

http://humanityplus.org/learn/transhumanist-declaration/

II.Pictures

1.Cyborg-Images

Fig.II.1.1: Deathlok´s metal skeleton is exposed beneath his skin, similar to the depiction of Schwarzenegger in the next picture.

Fig.II.1.2: The most classical cyborg image of the torn-off facial skin.

2.Wolverine and Similar Characters

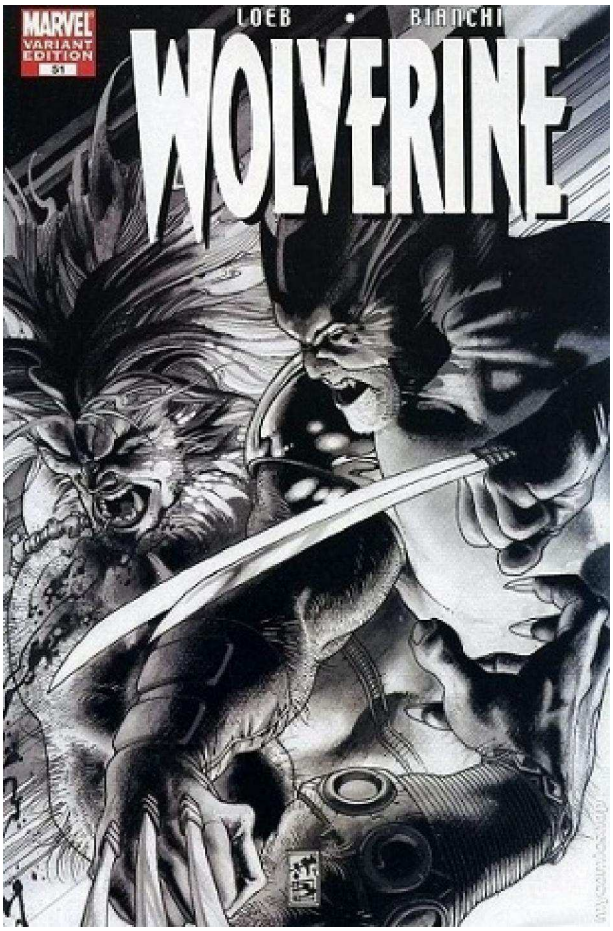

Fig.II.2.1: Wolverine exposing his claws ready to strike Sabretooth.

Fig.II.2.2: Ripclaw exposing his claws in rage.

3.X-Men and other Groups of Heroes

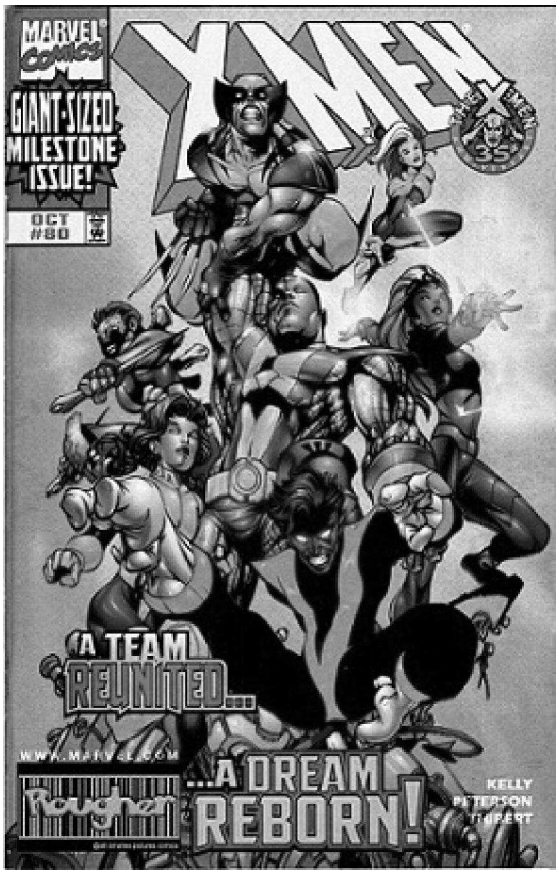

Fig.II.3.1: A typical X-Men cover, showing all featured heroes.

Fig.II.3.2: CyberForce cover shows extreme similarities to the X-Men cover.

4.Future Cities

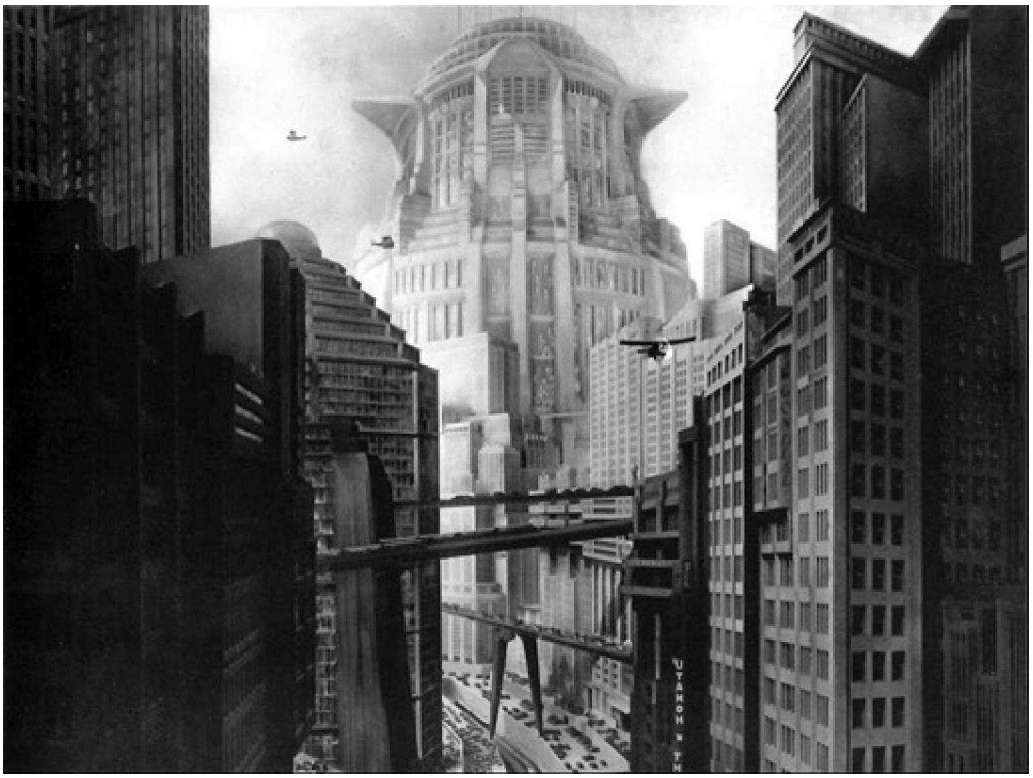

Fig.II.4.1: Fritz Lang´s Metropolis.

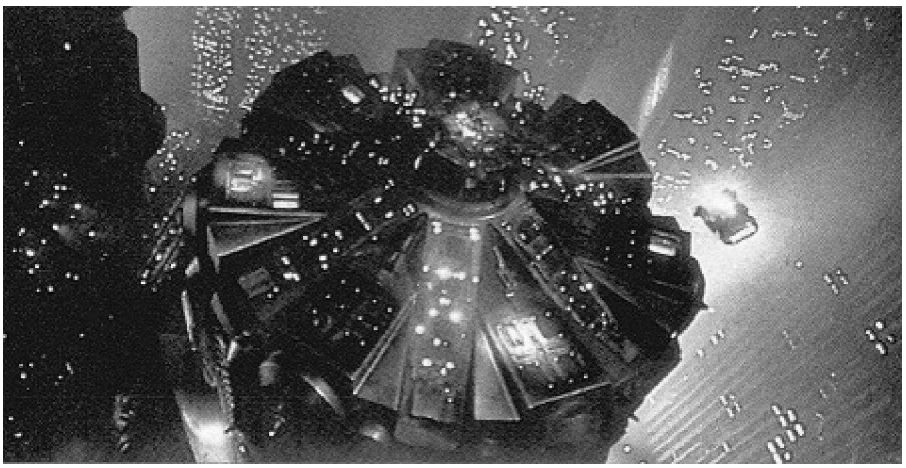

Fig.II.4.2: The high-rises from above in BladeRunner.

Fig.II.4.3: A typical future city designed by Moebius.

Fig.II.4.4: Another future city design by McKie.

5.Stelarc

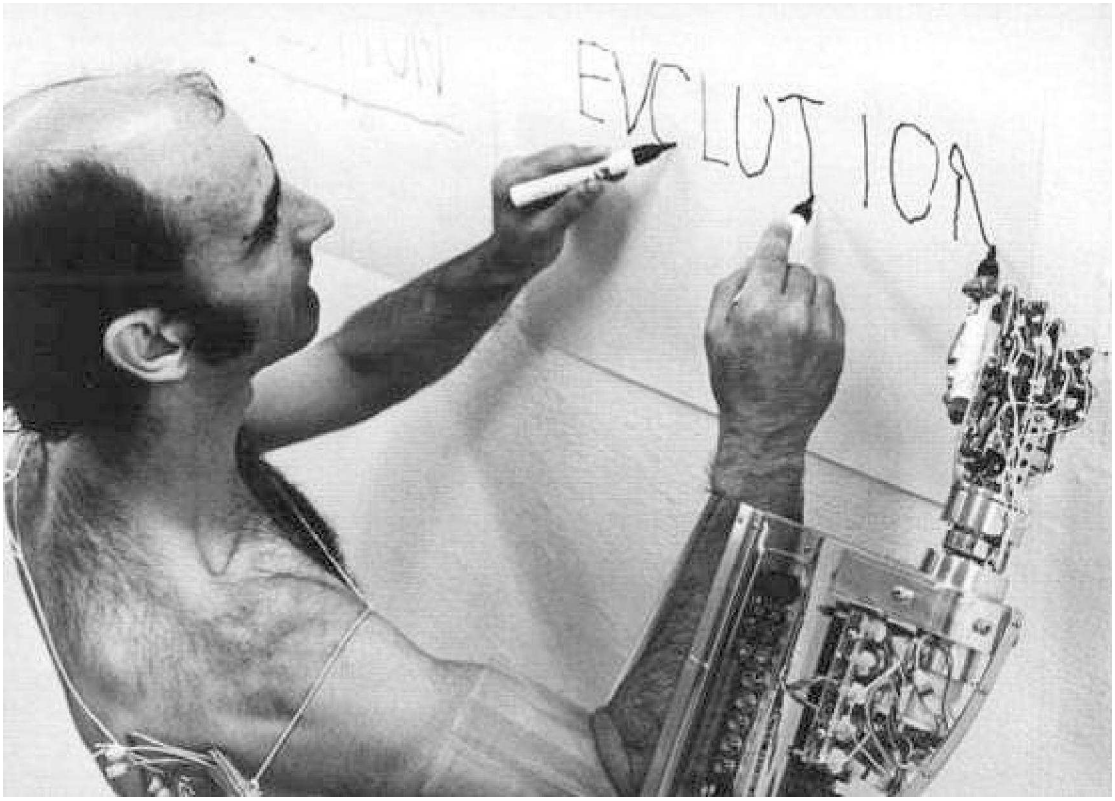

Fig.II.5: Australian artist Stelarc with his „third hand“. The performance was called ´handwriting´.

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