

Is that a future we want?: An ecofeminist exploration of images of the future in contemporary film

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Abstract

Contemporary film images of the future are usually made within the hegemonic world of the Hollywood¹ film industry. This paper will argue that these films, with their global reach, are contributing to the dominant single view of the future. A view that limits the future to a Western high-tech, white, heterosexual, patriarchal, militaristic, dark blandness where a small number of the rich and powerful men are in control; it is a view that misses out on the lushness of human and biological diversity and the joyful messiness of plurality and truly democratic systems of shared power. Using Causal Layered Analysis as a methodological framework, and ecofeminism to ask questions, this paper explores images of the future in a small number of contemporary films, with specific attention to images of the ecological future in depictions of landscape, food, and animals as well as women's roles in society as an indicator of social justice and equality.

Ecofeminism provides a theoretical base from which to identify areas of domination of women, human Others, non-human Others, and the Earth. Ecofeminism combined with Futures Studies provides direction on alternative ways to envision futures—futures that celebrate and protect local human and biological diversity as well as a recognition of common values based on requirements for peace, shelter, food, water, basic material well-being, and cultural expression. © 2007 Elsevier Ltd. All rights reserved.

1. Introduction

The sheer difficulty of imagining future sustainability different from the present is one of our greatest problems as a society. (Elise Boulding, [1, p. 90])

There is no avoiding the reality that the dominant images of the future today are bleak futures of entropy, violence, and despair [2] or naïve projections of Western scientific/high-tech optimism. For many people, images of the future come to them in the form of American films, either in theatres or in the expanding range of television. In films about the future, the Earth is usually in a state of ecological breakdown, where mega-cities dominate, and there is vast disparity amongst the haves and have-nots. These films may not be seen by everyone in the world but nevertheless their reach is large and deep. Therefore, analysis and critique of

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¹References to 'Hollywood' are of the hegemonic filmmaking industry in California—I recognise that there are many filmmakers in California who are working within the system, and on the periphery of industry, who struggle to make films that do not reflect hegemonic Hollywood values.

contemporary film is a worthwhile attempt to contribute to an understanding of what the hegemonic images of the future are doing to our ability to envision ecologically sound and socially just futures.

Ziauddin Sardar [3, p. 1] writes, “The future is being colonised and futures studies has become an instrument in that colonisation.” Futures studies, like future-based film production, is largely American, male, white, and assumes a uniformly heterosexual, traditional-family focused, often singular vision of the future. According to Ivana Milojevic [4, p. 62], “the domination of the masculinist images of the future has now reached a new peak. These images are accepted by globalising popular media, by local and global policy-planners and even by many liberal futurists.” Film images are created within an industry where cultural pluralism is expected to defer to the Western “creation of a single, world culture, based on the current ever-increasing expansion of Anglo-American culture, social norms and ethics and, last but not least, ways of doing business” [5, p. 163]. Film production today is indeed an example what Johan Galtung [6] refers to as ‘Americanisation’ because it is US cultural and economic domination under the name of globalisation. The majority of films seen in the world today are produced by the Hollywood machine, Bollywood’s prodigious production notwithstanding, and it is rare to find a film based in the future that is not American, contributing to the “belief that America is the locus not just for futures studies but for the future itself” [3, p. 13].

There are other ways forward, however; they are paths based on peace, ecological, and cultural diversity, localism, and where women’s visions for the future, as well as those of the non-West, are fully considered and acted upon. As Eleonora Masini [7, p. 43] writes “It is crucial that the visions approach to futures studies stop being an evasion and start to be recognised as a force by those who are bearers of the vision.” The visioning of our futures is far too important to be left solely in the hands of the Hollywood studios.

2. Ecofeminism

Ecofeminist² theory provides a base from which to analyse images of the future as well as illuminates alternative pathways towards the future. Ecofeminism brings to an exploration a hopefulness for a new ecology-based relationship between nature and culture, “in which mind and nature, heart and reason, join forces to transform the internal and external systems of domination that threaten the existence of life on earth” [9, p. 366]. The theory can be used to critique present systems as well as provide visions for a better future based on goals of ecological health, peace, and social justice.

Ecofeminist theory recognises the intersections in the patriarchal³ domination and oppression of women and nature.⁴ As women have been devalued, so has nature. As women have been physically harmed, so have animals, trees, and water. As women have been silenced, so has nature. Ecofeminism begins the journey towards a world where domination over Others is no longer a reality.

Ecofeminism also recognises other intersections of systems of domination (sexism, racism, classism, ageism, heterosexism, ableism, ethnocentrism, anti-Semitism, colonialism, speciesism and naturism) but begins with feminist analysis based on women’s issues [10,11]. It strives to overcome oppressive dominations in a holistic fashion “arguing that no attempt to liberate women (or any oppressed group) will be successful without an equal attempt to liberate nature,” [11, p. 1].

Patriarchy, as a system of domination, has created a dualistic structure that has relegated women and nature as subordinate to men and culture (the built or designed landscape in the case of films about the future). This

²The term “Ecofeminism” (eco-féminisme) is generally acknowledged to be coined by François d’Eaubonne in France, in 1974. Ecofeminism has since become an international collection of theories, which share a critique of the dualisms found in the dominant paradigm that construct aligned identities for women and nature “through a process of historical association, psychosocial development, and marginalization from androcentric culture” [8, p. 81].

³Patriarchy is understood in this paper as “the systematic domination of women by men through the *institutions* (including policies, practices, offices, positions, roles), *behaviors*, and *ways of thinking* (conceptual frameworks), which assign higher value, privilege and power to men (or to what historically is male-gender identified) than to what is given to women (or to what historically is female-gender defined.” [10, p. 64, my emphasis].

⁴‘Nature’ is generally referred to be ecofeminist as including non-human animals, plants, and non-human aspects of ecosystems. But I will refer to ‘non-human’ nature as well as a way to underscore that humans are part of nature and ecosystems.

false domination is used to justify the power and privilege that results in, what Karen Warren defines as an *oppressive conceptual framework* of ‘Up–Down’ thinking where greater value is assigned to Up, and lower to Down, with:

- men Up–women Down,
- whites Up–people of colour Down,
- culture Up–nature Down,
- minds Up–bodies Down, [10, p. 46].
- heterosexuality Up–homosexuality Down.

Patriarchy, as an *institutional system*, creates and maintains privilege as belonging to Ups, as well as justifying a false logic of domination, especially of women and non-human nature, which sanctions the subordination of Downs. This is not to say that women have no power, prestige or privilege but, while there are contextual variations, “what women under patriarchy have in common, as a group, is less institutional power and privilege than men” [10, p. 64]. The theoretical focus on institutions of patriarchy, not individuals, assures us that ecofeminism is “neither inherently anti-male nor inherently pro-female” but rather that “Ups are accountable for perpetrating unjustified Up–Down social systems” [10, p. 65].

Ecofeminism acknowledges the intrinsic value of all beings, including the Earth itself, where difference among species is acknowledged but not given greater or lesser value. It recognises a sense of Self in which humans are a part of ecosystems, that our collective and individual survivals and well-being are interconnected with all life [11].

It strives to overcome dualistic structures of domination with an understanding of interconnectedness where care for all beings (human, nature, and the Earth itself) is the basis for creating sustainable and socially just communities. Ecofeminism, therefore, also offers visions of the future where all beings flourish within (ecological and cultural) diversity.

3. Causal layered analysis

Causal Layered Analysis (CLA), as developed by Sohail Inayatullah [12, p. 826], is a methodological framework that offers a holistic and complex way of looking the visions of the future through multiple lenses to “decolonise dominant visions of the future.” CLA provides a structure to explore the relationship among various ways of knowing (empirical, social, discourse, cultural) as well as to build understanding in how each produces worldviews and affects our images/ projections of the future. It is, therefore, “both a new futures research method and a theoretical framework” [13, p. 562]. CLA, like ecofeminism, provides both an opportunity for critique as well as pointing to alternative ways of transformation.

The CLA framework is divided into 4 layers, in which Inayatullah encourages the researcher to move up and down vertically through the levels, as well as to conduct a horizontal analysis that asks questions at each layer, including:

1. *The litany*: these are the quantitative trends found in Pop Futurism, which often result in feelings of, fear, helplessness or apathy. As films about the future are the epitome of Pop Futurism there is much to document at this level; however, in this paper I have limited the analysis to five contemporary films.
2. *Social causes or social science analysis*: is used to analyse the economic, cultural, political, technological and historical factors in problems identified in the films, and in the filmmaking process.
3. *Discourse analysis/worldview*: this level is used to explore the worldviews depicted in the films, and by implication, the filmmaking industry.
4. *Myth/metaphor analysis*: is the “gut/emotional level experience to the worldview under inquiry” [12, p. 820]. I use this layer to analyse the connection between the mythologising and storytelling and ideological issues.

4. The litany—flying machines, tall buildings, and bad food

Films about the future often include a number of repeated elements, which in film studies terminology are called *codes*. Codes provide a shortcut into a film that enables filmmakers to spend less time explaining where and when the film takes place. Codes in films about the future include flying cars, skyscrapers, and elaborate costumes (the women's are often highly sexualised) that are immediate indicators to the viewer that this is *the future*. Other *futuristic* codes in the film about the future also include decaying large cities, or sterile enclosed cities, deserts, lots of garbage, and very few animals, with the exception of rats. Trees are rare. There is often the assumption of being post-apocalyptic, whether by nuclear war or an ecological disaster. The society is often a mass of busyness with many people and flying machines moving at great speed. Women and non-white men almost always play a minor supporting role in the film's story and in the depicted societies (if the women have a larger role is usually as a sexy fighting machine). Non-human nature, women and non-white human Others in Hollywood cinema often have the roles of form the background to the white male protagonist's story arc.

Blade Runner (theatrical release 1982; Director's cut 1992) is one of the few science fiction films that has received significant attention from film scholars, and is beloved by many viewers (at least in North America). The highly layered world of *Blade Runner* is modelled after *Metropolis* (1927), and in turn, many contemporary films are modelled after *Blade Runner*. A dead or dying Earth is assumed in *Blade Runner* as a result of the "ecological disaster that underlies the film's basic premise that much animal life has been extinguished and the Earth is nearly uninhabitable, so that offworld emigration is encouraged for those who qualify racially" [14, p. 4]. In the introduction to the film, we learn that the humanised robots (Replicants) were developed to prepare the Off-world colonies for those with enough privilege to live there. The Los Angeles of *Blade Runner* is a dark, wet, decaying city in 2019, where streets are crowded with people (who all seem to be in a hurry to get somewhere), garishly retrofitted old buildings and abandoned cars; alternating with high-rise towers and a massive modern monolith of a building that dominates the dark cityscape (home of the Tyrell Corporation, which produces the Replicants). There are a few flying cars, which are treated with obvious delight and awe by the filmmakers, but they seem to be the exclusive domain of the police and corporations. It is almost always dark outside and pouring rain.

Food in world of *Blade Runner* appears to be generally available, although it seems in limited quantities. In one scene, the main character, Deckard, orders four of something at a Chinese noodle house but the server tells him that he can have only two with his noodles, implying a shortage. While waiting for his place in the noodle house, Deckard is reading a newspaper with a headline about farming on the Moon. Alcohol, of various types, is available in both bars and stores. Smoking of tobacco, or a similar substance, is observed in a few scenes.

There is a lack of diversity within the L.A. of *Blade Runner*. The only real animals in the film are rats and pigeons. We see other 'animals' who are pets, an owl and a snake, but they are artificial—manufactured by the Tyrell Corporation. Women are not commonly seen in *Blade Runner* and are limited to the roles of assistant to a boss, sex trade worker, or romantic love interest. There are two featured 'female' characters but they are both Replicants and both play roles that support the male story. The protagonist of the film is a white male, as are most of his fellow police officers, but the majority of people left in L.A. 2019, and who merely form part of the background to the film, are non-white.

Minority Report (2002) is located in a speculation of Washington, DC in 2055. The city has a strange mixture of the old section of the city, with brownstone single-family homes and townhouses, parks and yards, and the new suburbs made of residential towers, which are tall enough to accommodate cars racing up and down them. These single passenger cars operate on a system called 'maglevs' that enables the cars to move vertically and horizontally, at great speed, of course. A crowded, grimy subway train is shown in one scene. The city is definitely divided into haves and have-nots. The wealthy live in posh apartments in the sky (accessible by their maglevs), grand homes, or the brownstones. The rest live in dark, cramped apartments in *the sprawl*; where there is garbage everywhere, and a significant number of rats are shown (the only animal represented in the film).

Areas of nature, or non-city, are found in *Minority Report* but these areas are depicted as dangerous (plants that can kill humans), or desolate landscapes (merely as Other to the city). But, in a rare positive image in

futures-based film, these natural spaces are seen as a place of refuge from the intensity of the city. The world of *Minority Report*, uncharacteristically for the genre, is not post-apocalyptic; trees, plants and water remain, and food is still available. We see a breakfast of eggs and other things being cooked, as well as orange juice, and later in the film a tomato and lettuce sandwich, and herbal tea with honey. However, the agricultural spaces where the food is grown or the honey is collected are not depicted in the film. Like *Blade Runner*, it also rains a lot.

In *Minority Report*, 50 years into the future, not much has changed in terms of social/cultural structures—white men still form the core of power (a black man provides technical assistance to otherwise all white team). Women are predominantly restricted to roles of assistants/secretaries, supportive wives, and a grieving mother. There is a brilliant female scientist, who now regrets her role in the new technology, which came out of her concern for children of drug addicts, but she has removed herself from any connection to society in her solitude amongst the killer plants. There is also a young woman who is a ‘precognitive’ with great intuitive powers to see the future who is used to help the hero/lead in escaping an unfortunate fate.

Further into the future, in *The Fifth Element* (1997) white men are still clearly in charge. There is a black president but he defers to his all white, all male military advisors and clergy. *The Fifth Element* announces its landscape as New York City in 2214, in a world of over 200 billion people. It is a city of extremely tall towers and flying cars buzz around everywhere. The ground level, on the rare times it is shown, is garbage ridden and cloaked in fog. The only Earthly non-hyper-urban landscape shown is a desert. An ocean is depicted but it is on another planet. There is no sign of non-human species or natural landscapes anywhere in this version of New York; with the exception of the hero’s cat, and his aquarium of fish, who share his claustrophobic cubicle apartment in the sky.

Food in *The Fifth Element* is presented as industrialised (McDonald’s food is shown a few times including a sign saying ‘over 65 trillion served’) and assorted leftover containers of other fast food) or by magic (perfectly roasted chicken and vegetables on a platter out of microwave-like machine, an exotic delivery of Chinese food in a flying sampan, and fruit that emerges from a desk).

The litany of conventional ‘futuristic’ elements in *The Fifth Element* is somewhat relieved by the humour and elaborate costumes in the film—but even these cannot diminish the overall feeling that this is an entirely built, natureless, society dominated by white men. There are very few women in the film and, with the exception of the exceptional and fully instrumentalised ‘fifth element’, Leeloo, and a very blue female alien, the few women represented are reduced to stereotypes of a whining mother, a daughter or an escort of a powerful man, sexualised flight attendants, groupies, secretary, and military assistant.

In *The Matrix* (1999), and its subsequent sequels, humans encased in pods, are the energy source for machines who, in turn, provide the humans with an alternate reality that is much more ‘alive’ than their actual life on a dead Earth. As Martin Barker [15] writes of *The Matrix* “with the state of the earth as we are shown it: a shattered, post-nuclear lifeless crust. If Reeves at the end appears to break the computer and free humanity, what on earth are they going to live on?” Food in *The Matrix* is reduced to an unpleasant looking goo in the dystopic ‘reality’ but a steak dinner and home baked cookies are shown within the computer programmed ‘alternate reality’. There is nod towards human diversity within *The Matrix*, including a black male warrior in a leadership role, a black female spiritual guide (The Oracle), and a highly athletic female warrior (in fetishised clothing) but the film’s hero is a young white male who is treated as a messiah.

Star Wars—Episode I—The Phantom Menace (1999) includes a number of planets. Naboo is green and lush, and its terrestrial citizens live under female leadership in a peaceful, beautiful, calm community with abundant plant life and where people walk everywhere (not a flying machine to be seen until they are invaded). In the film, Naboo is being attacked, and the women-led citizenry is unable to defend themselves so the men of the Jedi come into protect them. The Jedi warriors take the queen and her entourage to their home planet for safety. During the spacecraft journey the pilot happily boasts that “their planet is one big city”, and from afar, the planet is entirely brown and black. Closer up, we see a solidly urbanised, mega-city with brownish, black or grey towering buildings covering every centimetre of space—and flying machines are everywhere. There is an overwhelming sense of purposeful, busy-ness. Once they land, the women of Naboo are hurried off somewhere, while the Jedi men go off to get direction from the source of power in the Star Wars universe—the all male, all knowing, Jedi council. The Jedi chambers are completely enclosed, cut off from the urban outdoors—through the windows we can see thousands of flying machines racing among the buildings.

If there is anything positive in this film, it is that the peaceful, green, technology-free planet of Naboo was seen as worthy of protection. This is tempered, however, by the portrayal of Naboo as portrayed as weak, quaint, feminine, powerless, and historical. While the nature-less planet of the Jedi is highly technical, entirely urban, serious, masculine, powerful, and ‘futuristic’.

5. Social causes or social science analysis

Commercial film production began in France but was quickly dominated by the US. Prior to World War 1, national film industries in many countries in the North were thriving but by the end of the war, the US was producing 85% of the world’s movies. For example, in Australia, in 1914 the US supplied around 50% of the films shown but, by 1923, Hollywood supplied around 94% [16]. Today, Hollywood continues to maintain this global domination but how Hollywood operates has now changed.

Films used to be made in film studios that existed only to make movies. In today’s New Hollywood, film production is only a small part of a vast conglomerate that is part of “an increasingly diversified, globalised entertainment industry” [17, p. 75]. And often, within the conglomerate, the media/entertainment component is small compared to other activities. For example, General Electric owns Universal Pictures, 80% of NBC television broadcaster, many local television stations, and the Sci-Fi cable broadcaster [18]. General Electric is also a major supplier to the Pentagon with over \$2.8 billion US in Defense contracts in 2003 [19].

Within New Hollywood the studios have moved from making many movies a year to relying increasingly on the big blockbusters to reach the annual corporate profit projections. Science fiction blockbusters are now one of the most lucrative film genres in filmmaking history, and they are “also a significant economic weapon for Hollywood, few others being able to afford to compete at the expensive high end of the latest effects technologies” [20, p. 64]. Hollywood,⁵ with films like *Blade Runner* and *Star Wars*, has set the standard for the expensive special effects, elaborate sets and costumes, and movie stars that audiences now expect to see in films about the future.

These blockbusters are supported by large production and marketing budgets that work to entrench the image making in a small numbers of companies and, in turn, the companies chose established filmmakers who are deemed to be low risk. In 2005, six studios in Hollywood spent record sums of nearly \$10 billion US in production (\$6 billion) and marketing (over \$3.5 billion) because “studios are facing slowing growth in box office returns, and in response they are turning out fewer, but bigger, films—especially those that allow them to generate greater spin-off revenues from DVDs, games and merchandising” [21]. These large marketing budgets are part of a system that now results in a Hollywood film opening in thousands of screens around the world in attempt to maximise opening weekend grosses, which, in turn, drive up spin-off revenues and options. For example, *Star Wars Episode 1—The Phantom Menace*, grossed \$65millionUS in the US and Canada (on 2970 screens), and £9.5million in the UK (on 460 screens)—in its first weekend. The film now has world theatrical and rental gross of \$925.6US globally (all data from imdb.com). These figures do not include the spin-off of video games, toys, books, bedding, that are thought to have brought in revenues higher than the film itself [20]. These spin-off products, like the films themselves, are developed predominantly for male users (boys and young men).

Most films are still written and produced for the male gaze, which is not surprising since the “men dominate overwhelmingly in the production of almost all popular genres” [22, p. 3]. The films are being made within a highly patriarchal industry, which restricts women and many men from reaching their higher potential. In an extensive study of women executives in the US, conducted by the Annenberg Public Policy Centre, the researchers found that women are “significantly underrepresented as corporate leaders in the largest communications companies” and that the top-echelon executives “are still overwhelmingly male” [23, p. 3]. On the creative side, in Hollywood, men also dominate in writing (85%), producing (84%) and directing

⁵*The Fifth Element* technically is not a Hollywood film because the director/screenplay writer (Luc Besson), producer (Patrice Ledoux), and production company are from France. But the film’s special effects were predominantly done by US companies and the film takes place in New York, American film star Bruce Willis has the lead role, and all the actors speak English with American accents, with a few exceptions, including the fifth element, which further enhances her Otherness. So it passes as an American film to most viewers. Also *The Fifth Element*, is consistent with hegemonic Hollywood values and therefore, is sexist, racist, and displays a lack of non-human nature.

(93%) in the film industry (Center for Digital Democracy, 2002). And things are getting worse—not better. Martha M. Lauzen [24], of San Diego State University, found that during the time period of 2001–2004 that the percentage of women working as directors, executive producers, producers, writers, cinematographers, and editors on the top 250 American grossing films has declined from 19% in 2001 to 16% in 2004, with women as only 5% of directors in 2004 (a decline since 2000 when women accounted for 11% of all directors). She also found that only 16% of the total staff on science fiction films were women. All recent films about the future have been written and directed by males, and all them white, which is not surprising as only 8% of the Hollywood Directors Guild are non-white [25]. This makes for a very limited experience of the world and of visions of the future, and results in films that are highly repetitive in their depictions of a dead-Earth scenarios, and carry an underlying message that is sexist, racist, and homophobic.

Non-whites are rarely represented in science fiction films—and when they are it in a less privileged position. For example, the various people of colour remaining on Earth in *Blade Runner* are there because they do not fit the criteria for moving Off-world. Or the more obviously racist statements in the *Star Wars: Episode One-The Phantom Menace* where the Downs include Tatoonines, an ‘uncivilised’ community of people who are depicted as Muslim Arabs [26], and the Afro-Caribbean sounding Gungans who are a cowardly and lackadaisical group [20]. The Afro-Caribbean caricature is also maintained in *The Fifth Element* in a ganja smoking, dreadlocked airport worker.

The heroes of the blockbuster films of the future are almost always men (*Alien* is the often cited exception) and always white (Keanu Reeves as Neo in the *Matrix* has Chinese Hawaiian heritage but he passes as white to mainstream viewers [27]), and they solve conflict with high-tech weaponry and/or physical fighting with great athletic prowess, made even more spectacular with special effects.

Technology in films of the future is somewhat of a contradiction. On one hand, the filmmakers and audience celebrate technology and adore the wizardry that is accomplished with special effects. On the other hand, many of the films can be interpreted as cautionary tales of what will happen if we do not begin to address our relationship with technology, and what it is doing to us and to nature. Brooks Landon [28, p. xxv] considers this a source of ambivalence, which is created when the “production technology of the film is so seductive that the technological accomplishment of the film sends quite a different message than does its narrative.” This ambivalence is strongly witnessed in the filmic depictions of nature and food.

In most Hollywood films of the future, nature is dominated by technology, or technology has completely destroyed most of nature through war, nuclear explosions, or pollution. In some films, technology has replaced landscape with an entirely built and controlled urban environment where nature is rendered invisible, and where technology itself has become landscape, and “nature is displaced by technology” [29, p. 267]. Food, as an indicator of humanity’s place within ecosystems, is most often reduced to gruel, industrialised fast food, or high-tech wonder reflecting a collapse in ecological functioning. As Laura Forster [30] writes with reference to *The Matrix*, but could apply to almost any film about the future, food functions as a reminder of the deeper aspects of life missing from the future as envisioned in the film.

Technology in films about the future also reflects the connection between Hollywood and the military. For example, American President, Ronald Reagan, in a speech defending the Strategic Defense Initiative (SDI), remarked that ‘The Force is with us’ (a *Star Wars* phrase) and his “confidence in SDI, despite the scientific community’s doubts, seems to have drawn on science fiction’s reputation as the oracle of technological feasibility” [31, p. 3].

Futurists and technology experts also provide all manner of opinion that point towards a vision of the future where Western extreme technology reigns supreme. Almost any edition of *The Futurist* will contain information on how the stuff of human life from our teeth, to clothing, to making babies, to security, to business, to the environment will benefit from a high-tech solution. And almost any magazine or book on technology or business will contribute to the image that the future is one that will be mediated by *Man*-made technology. Men’s appropriation of discussions of technology “has led to a general belief that all our problems can be resolved by technology” [32, p. 88]. Design of future cities and buildings, predominantly in the hands of male architects, planners, futurists, and designers, also provides filmmakers with projections of a future detached from nature with their endless proposals towering buildings, domed cities, and an obsession with personal transportation (the car that knows no limits).

The link between futurists and filmmakers is confirmed at the *Minority Report* website [33], which reads:

In April of 1999 the *Minority Report* production commissioned a think tank that was brought together to develop a framework for a world, specifically Washington, DC, that could exist in the year 2054. A group of experts who call themselves “Futurists” came together and brainstormed on topics ranging from city landscapes to futuristic weapons. All this was done in an effort to create a futuristic world for *Minority Report* that is based realistic theories from leading experts.

But as Johan Galtung [6, p. 139] documented, this reliance on *experts* is simply projecting the status quo of today into the future with the goal of creating “a controlled future with the same countries/groups in power as today” based on technical means. It is an unfortunate reality that there are many experts, including scientists, who are willing to offer their support for unsustainable technical solutions to problems or even for harmful projects in return for financial gain, or for personal or institutional power, while claiming professional ‘objectivity/immunity’. Unfortunately, their *expert* voices often carry more weight in decision-making processes than those who would be directly affected by the project or technology, or who have local knowledge. This needs to be challenged, because as “just as war is too important to be left up to the generals, science and technology is too important to leave in the hands of experts” [34, p. 302]. The hegemonic approach to the future by filmmakers, in collaboration with experts, is creating singular image of the future based on high-tech assumptions with too many gizmos and too little attention to social aspects of the envisioned community. And it does not always work. *Minority Report* is a hodge-podge mix of hyper-modern (with the maglev cars that drive up the sides of towers) with elegant historical homes in treed neighbourhoods. Logistically, just how would the ultra wealthy from the skyscrapers drive their maglevs to visit their wealthy friends in the elegant old neighbourhood? Public transit, perhaps?

6. Discourse analysis/worldview

Hollywood’s science fiction blockbusters are in one sense spectacular flights of fantasy that are promoted as pure entertainment but they are also carriers ideological baggage. Joanna Russ [35, p. 29], award-winning American contemporary science fiction writer, argues that “*Star Wars*—which is being sold to the public as “fun”—is, in fact, racist, grossly sexist, not apolitical in the least but authoritarian and morally imbecile.” Her analysis is true of most of the futuristic films to come out of Hollywood. The worldview is clearly one of supporting American dominance of the world, patriarchy, militarism, and late-capitalism. The films “inherent conservatism—a desire not to offend potential filmgoers—ensure that mainstream productions do not transgress too far from dominant and familiar constructions gender difference” [20, p. 35]. Films, even those about the future, function on a connection to familiarity (patriarchy and global capitalism *are* familiar) so filmgoers not only accept the white male hero and a commodified, nature-less world as *the* future, but audiences may even rebel against a less than conventional view of the future. What we often think of as *futuristic*—the hyper-urbanism, lack of non-human nature, focus on personal cars (earth bound or flying), corporate and technological dominance, fetishised clothing on women—are images that reflect, and are legitimatised, by the hegemonic worldview of today [36].

Another code of what is *futuristic* is urban decay, as depicted in collapsing buildings and garbage on the streets. The garbage that is ubiquitous in many science fiction films is an indication of a “thoroughly commodified culture” [37, p. 245] where everything is manufactured, has a price, and is instrumentalised for human use. Even the ‘wild’ animals in *Blade Runner* are commodified reproductions for human enjoyment as pets.

But the films about the future can also challenge hegemonic values in their role as cautionary tales or critical dystopias. How much of the cautionary note is the intent of filmmakers is versus the wishful thinking on the part of scholars and fans depends on the film, and the filmmaker. For example, *Blade Runner* is often valorised as a cautionary tale, and yet the director, Ridley Scott, was not intending to create a warning but rather to produce an entertaining film with an image of what he envisioned to be a tangible future; he admits that it is not a promising vision but one that is likely unless we make drastic changes [38]. Whereas, with *Rollerball* (1975), Canadian-born director, Norman Jewison [39] quite purposely set out to make a film that addressed issues of corporate domination and violence in sports.

Minority Report clearly supports a conservative worldview, and is a telling example of how films about the future have moved increasingly in recent years to supporting rather than challenging hegemony. Director, Steven Spielberg, has chosen to accept that the status quo will guide his vision of the future—that of a patriarchal, racist, high-tech and completely heterosexual society. But *Minority Report* is not unique in its blindness to sexual diversity. I have not yet found any homosexuals represented in contemporary films about the future. Many futurists also seem somewhat reticent as well to consider alternative ways of defining sexuality and family. For example, 1000 years into the future, the Foundation for the Future, envisions a conventional white, heterosexual family as their model [13]. Even *The Matrix*, which is described as being a post-modern film, is back in the 50s in terms of relationships that are solely heterosexual and racially segregated.

The Matrix with its focus on metaphysics and alternate reality has become a cult hit, and has even garnered scholarly interest in such books as *The Matrix and Philosophy* [40]. However, its “subtle spiritual meanings are drowned by the masculinist focus on power” [26, p. 501]. *The Matrix* could be read as a critical dystopia, a warning of what could happen if we do not begin to address the power that is ascribed to technology in the present, but it does not challenge the ultimate power of racist, capitalist patriarchy—so one wonders how real change will be initiated. Nor do they offer any hint of hope for a future world that is alive with human and ecological diversity.

Unrestrained capitalism, both inside and outside of the films and the film industry, has been successful in stifling utopian vision by convincing people that everything is fine, the present is as good as it gets, and the future can only be worse. “Utopia has become another victim of capitalist triumphalism, killed off by the harbingers of the market theodicy who proudly proclaim that we will never have to risk crazy revolutionary ideas again” [41, p. 220]. We have been lulled by films, and other sources of images, to believe that our future is going to be grim—so we clutch on to the present. Many of us feel that there is nothing we can do to make change possible, or even desirable. We have lost our *future image literacy* in leaving it up to the experts and the filmmakers to create it for us [1]. But we can reclaim our ability to image socially just and an ecologically sustainable futures, and filmmakers can be part of this journey, if they chose to.

7. Myth and mythmaking

With no better vision of the future to offer, the United States may possibly succeed in forcing the rest of the world into one of these futures imagined in Hollywood. Or perhaps these movies are best seen as warnings—whether or not intended—not to follow the leadership of a social structure that either doesn't know where it's going or sees its own future as hopeless [42, p. 85].

Movies are narratives with powerful images—some are born out of myths and some strive to become myths. Mythic narratives in film dramatise values that contribute to how we see the world and ourselves; with cinema as the ‘engine of the empire’ American values become portrayed as universal values [43, p. 24]. The mythologising also extends into a pattern where films about the future promote the myth of progress (domination by the built environment at the expense of human and non-human communities as the only way forward), the myth of capitalism, (where unbridled Western corporate interests controlling our communities and our lives as our only future), the myth of patriarchy (that domination by white men is the only path “the triumph of white, male reason” [13, p. 565]), and the myth of American global hegemony (that economic, cultural, and political dominance by one country is okay).

From an ecological perspective, the projection of these myths into the future translates into cinematic worlds where *the urban* is *the way* of the future. As discussed in The Litany section above, the Jedi warriors' planet (as the seat of power in the *Star Wars* universe) is depicted in *The Phantom Menace* is completely urban, *Blade Runner* is in the future of a very dense, grimy Los Angeles, *Fifth Element* is a filmmakers projection of a totally urbanised nature-less New York, and in the predominantly urban *Minority Report* plants kill and the non-urban spaces are devoid of action. Even the term ‘futuristic’ is synonymous for most of us with the notion of a highly urban landscape of high-rise buildings and elevated highways. But where is there room for non-human nature if only built spaces exist? Where will real food be grown? children play? The myth of progress as solely urban reflects the present (and historical) Western bias that the city is the sole centre of culture and decision making. And yet, it is in rural areas, where many people would choose to live, and make a living, if

they were not forced from their land by agribusiness supporting laws and policies, un-just concentration of land ownership, violent conflict, or economics which concentrate wealth in cities. American filmmakers, and futurists who advise them, are choosing not to see the movements towards sustainable and just futures that are being played out in rural areas, towns and small cities around the world as people and communities are reclaiming a love of home place, of rural lifestyles, and healthy food that is locally grown. Also, populations in many countries are starting to go down,⁶ and decision makers in many countries of the North are expressing their concern about reducing populations with calls for increased immigration numbers to maintain growth-based economies. And population growth in most countries of the South is also slowing. Therefore, hyper-urban landscapes to accommodate extreme numbers of people (such as the 200 billion world population that is announced in *The Fifth Element*) are simply not going necessary—especially as the myth of corporate capitalist domination is further challenged.

In films about the future, white men and the institutions/corporations they work for are in control—the myths of unbridled capitalism and patriarchy are relentlessly supported and unchallenged. In *Blade Runner*, the Tyrell Corporation and other corporations dominate the landscape, and the men of the police and Tyrell retain power. In *The Minority Report*, the citizens of Washington, DC live in awe and fear of the small number of powerful rich men who control the Precog branch of the government (one must assume by their visible wealth that they own the technology privately and are not ordinary public servants). In *The Fifth Element*, the white men of the military, clergy, and the corporate demon, Mr. Zorg, battle for power to save/control the Earth supported by the fully objectified/instrumentalised female fifth element. And in *The Phantom Menace*, the all male Jedi are challenged in combat by other males (human and non-human) seeking power but the myth of the masculinist Jedi superiority is never challenged within the film. George Lucas, director/writer considers his *Star Wars* series of films to be myths, and ones that he hopes will inform young people for many years [44].

And as most futuristic films come out of US, the myth of the apocalypse also figures high. “Apocalyptic is as American as the hot dog” where fear of technology, and guilt about what humans have done to the Earth, create “a growing resolve that only radical, in-breaking action can successfully resolve problems today” [45, p. 179]. Some people feel that we have reached a point of no return on Earth, where human impacts are too great, so we need to just let the destruction happen and the lucky few (human or perhaps only non-humans) who remain will begin again. The myth of apocalypse, as destiny, is reflected in a “pornography of catastrophe” films that are dressed up as a cautionary fables but are “one percent message, ninety-nine percent thrills” [46, p. 35]. The argument that the overwhelming number of future based apocalyptic, dead-Earth films are useful as cautionary tales is, I believe, worthy of challenge because they are not effective. Ecological destruction continues: a local government approves yet another destruction of forest or agricultural land, a national government chooses to take little or limited action to protect water, seeds or the air from corporate abuse and citizenry foolishness, a transnational company pollutes another communities water source. Has anyone initiated change in their lives or their community as a result of seeing *Blade Runner*? My guess is: no. We could use a few films that feature a sustainable Earth, as a counterpoint to the endless dystopias, which would provide stories of more hopeful way into the future.

Storytelling is a powerful communicator of information and mythologising, and film has the additional strength of providing images to accompany the narrative. Films are now produced in an industrialised corporate environment, and those holding the power in this highly effective mythmaking industry are the elite of Western hegemony. Peter Guber [47] formerly the studio chief at Columbia Pictures and chairman and CEO of Sony Pictures, and now chairman of Mandalay Entertainment was asked, what do you think attracted the multinational companies to the film business? He answered:

I think it’s like the moth drawn to the flame. There’s something that you can’t get quite anywhere else... It’s the attraction of the storyteller. There’s something in the magic of the lights that is inextricably true for all human beings. There’s something about the magic of the shaman, the storyteller in front of the flickering images of the campfire that forever in our species have wowed us, from the very, very beginning...

⁶Japan, Germany, Italy, Japan, the Baltic States, and most of the successor countries of the former Soviet Union are expected to have lower population in 2050 than in 2005 (<http://www.un.org/esa/population/publications/WPP2004/>).

So to own a piece of that territory, to own a piece of that real estate, to somehow say “That’s mine,” and then you see it on every screen in [the] world... is a very compelling element. Now, when it’s also economically sound—and it can be—[it’s] a very powerful magnet for these companies.

Corporatised Hollywood simply has too much say in what our collective Earth futures will look like—their vision of the future is too pessimistic and too unhealthy. Films about the future are based on the myth of American hegemony as *the* universal narrative and as being universal values [43]. It is an image of the future that is too destructive towards the Earth and all creatures, and focuses power in too few people. “Hollywood’s hyper-conglomerate vision colonises the world, even those members of the public who know that an alternative cinema exists are denied access to it. Such is the current tyranny of images that informs moving image production, distribution, and reception in the contemporary dominant cinema” [48, p. 20]. The colonised future out of Hollywood is one that is overwhelming dystopic and provides little hope for healthy and just futures for most of the planet. Therefore, we need to actively work to reclaim futures myth-making from the Hollywood machine. As Fred Polak argues, the first step in creating hopeful alternatives is “to understand our ailing visions in order to know what to reject and what to accept in them” [49, p. 367] and the process has begun. We need to continue to build understanding of film images of the future, but also to begin to create new images of the future based on a plurality of sustainable and just visions.

8. Creating diverse, just and sustainable futures

Creating ecologically sustainable and just futures will be a long-term, complex exercise but one that should be a focus for all facets of human decision making and creativity. Part of the exercise will be in recognising that the existing blueprint for the future envisioned by many people in the world, and especially those who hold an unhealthy amount of power, is a result of Hollywood’s dictate. We need to begin creating alternative images of the future, new visions, which will form resistance to the hegemonic images.

Ecofeminism tells us that we are interconnected with the Earth and all beings, human and non-human. Carolyn Merchant [50, p. 242] envisions a new Recovery Narrative that transforms the present state of environmental decline into “a post-patriarchal, socially just ecotopia for the third millennium” based on an Earth shared between humans and non-humans in a partnership model. Other ecofeminist visions include a recognition that there are things that we have in common with other humans—that we resonate with and that cross cultural boundaries—which are universal truths or common values. But ones based on, what Karen Warren calls, a *situated universalism*, which are *situated* in that they grow out of and reflect historically and culturally unique real-life experiences and practices; they are *universal* in that they express generalisations common to and reflective of lives of diverse peoples situated in different historical and cultural circumstances [10].

Sissela Bok, argues that such values begin in the needs for nourishment, oxygen, water and shelter but also extend to basic norms such as a constraint on killing. She translates these needs into minimalist common values of: “basic forms of positive duties of care and reciprocity; of constraints on violence, deceit, and betrayal; and of norms for procedures and standards of justice” [51, p. 41]. Her recognition of things we hold in common has its grounding in collective survival of people but could be extended to all beings of the Earth. From such an acknowledgement of our interconnections, shared needs and values, the next stage is to move to creating new visions of the future, new preferred futures, which will be the catalyst for action towards a socially and ecologically just world.

Creating preferred or desired futures is not an easy task, it requires that we move “beyond the rational and work at the levels of intuition and emotion” [7, p. 41]. Visioning, with its connection to the present, reminds us that all is not well—that there are many people and ecosystems experiencing pain—but still asks that we take a hopeful leap of faith. Hope is what moves people to take action to create “enough power to change the world around them, even if a little” [52, p. 64]. But hope will enable us to prepare visions of a sustainable world. “Visioning means taking off all the constraints of assumed “feasibility,” of disbelief and past disappointments, and letting your mind dwell upon its most noble, uplifting, treasured dreams” [53, p. 224]. Creating visions of the future that are different from the hegemonic images found in contemporary film requires that we establish processes to engage with, and listen to, those who are presently on the periphery of power.

Eleanora Masini urges futures studies scholars and practitioners to search for “listeners to seeds of change” to create visions of futures, and suggests that these will be found in the visions of women, children and those of the non-West. This plurality of visions of the future will enable a broadening of what is considered of value beyond the economic and power drivers in most films. “If futures studies opted to work within ‘feminine’ guiding principles it would most likely prioritise the futures of education, parenting, community, relationships, and health—the real grand issues!” [7, p. 69]. It may be hopelessly, or should I say, hopefully, utopian to believe that filmmakers could also make this leap towards the real grand issues but the films. But for all the negative images in the blockbusters films, they also include narratives that value children, love, and human relationships, so it may be possible that filmmakers will understand the need to expand this caring to the interconnected Earth and all beings.

Filmmakers have great power to show the world that another path is possible—to “replace the global suicide economy (devoted to the service of money) with local living economies (devoted to the service of life)” [54, p. 221]. Creating what Maria Mies calls, a subsistence perspective, that includes, amongst other ideas, an acknowledgement that economic activity should be in support of life and that recognises humans as part of nature (not above it) based on an ecofeminist vision of overcoming of hegemonic dualisms [55]. That filmmakers could participate in creating such a vision is not entirely unrealistic.

An Australian feature film called *Epsilon*, or *Alien Visitor* (1997) infers through the storytelling of a grandmother to her granddaughters (in the prologue and epilogue which takes place sometime in the future) that the Earth is now a healthy place—as opposed the present time where the film’s main story takes place. We don’t see an image of what this future would be like, however, because the elder tells her story around a campfire in the darkness. A hegemonic aspect of the film is that the saviour of the Earth is a white male who has a transformation based on knowledge passed on to him by a female alien visitor. Alas. Nevertheless, the overall message is that the people have completed a great transformation and now live in harmony with nature.

Another hopeful step towards filmic images of sustainable futures is *Aeon Flux*⁷ (2005) where a goal of the filmmakers (as described in the DVD commentary) was to create an image of a future world that was not the classic grimy dystopia but the greener world of a walled city. The depiction of non-human nature provides a parallel to how humans are treated in the future world of Bregna—there is beauty and calm on the surface—but life is highly controlled by a small group of white men and something is going very wrong. At the end of the film, humans and non-human nature are freed by the female protagonist (after much too much killing and sexualised violence) and we are led to assume that there will be less control, more freedom, and more interconnections with nature in the future. Both the director and the main producer of the *Aeon Flux* were women (Karyn Kuzamo and Gale Ann Hurd) and they chose a production designer and a director of photography who are both from New Zealand, which may have something with the less conventional filmic depiction of the future. *Epsilon* and *Aeon Flux*, although not exemplars of what is possible, are nevertheless, important examples of another way forward. It is my guess that there will be more films with less conventional images of the future if there is audience approval.

Film is created for a mass audience and will change if we demand it do so. But there is also the opportunity for filmmakers to choose to contribute to change—to take a leadership role in the creation of ecologically sound and socially just futures. Science fiction film production could become part of a *progressive cinema*, where filmmakers understand their responsibility to “make an incomparable contribution to the welfare, the recovery of humanity” [56, p. 163]. Perhaps this progressive cinema may not come, initially, from Hollywood, but aided by emerging digital technologies very soon creating a film about the future will not be solely in the domain of the major studios. I envision a multi-country co-production film about the future, written by a woman, or perhaps a collaboration amongst a few, directed by a woman, perhaps Indo-Canadian Deepa Mehta, perhaps based on a narrative of how people from India and South American (using high-tech communications technologies) help communities in USA and Canada rid themselves from transnational corporate dominance, using non-violent methods, to protect their water and seeds. It would be a beautiful, noisy film with the requisite conflict (but conflict without violence), and would include a celebration with lots of healthy food, dancing, families of all kinds, and it would be in the year 2075.

⁷Aeon Flux was released on DVD just as this paper was being finalised. A more detailed analysis of the film will follow in a future paper.

References

- [1] E. Boulding, *Building a Global Civic Culture: Education for an Interdependent World*, The John Dewey lecture, Teachers College Press Teachers College Columbia University, New York, 1988.
- [2] R.A. Slaughter, Futures beyond dystopi, *Futures* 30 (10) (1998) 993–1002.
- [3] Z. Sardar, The problem of futures studies, in: Z. Sardar (Ed.), *Rescuing All Our Futures*, Adamantine Press Limited, Twickenham, England, 1999, pp. 9–18.
- [4] I. Milojevic, Feminising futures studies, in: Z. Sardar (Ed.), *Rescuing All Our Futures*, Adamantine Press Limited, Twickenham, England, 1999, pp. 61–71.
- [5] A. Jenkins, W. Morgan, Futures studies and co-evolutionary futures, in: Z. Sardar (Ed.), *Rescuing All Our Futures*, Adamantine Press Limited, Twickenham, England, 1999, pp. 163–175.
- [6] J. Galtung, What did the experts predict?, *Futures* 34 (3) (2003) 123–145.
- [7] E.B. Masini, Rethinking futures studies, in: Z. Sardar (Ed.), *Rescuing All Our Futures*, Adamantine Press Limited, Twickenham, England, 1999, pp. 36–48.
- [8] C. Sandilands, *The Good Natured Feminist: Ecofeminism and the Quest For Democracy*, University of Minnesota Press, Minneapolis, 1999.
- [9] Y. King, Healing the wounds: feminism, ecology and nature/culture dualism, in: *Feminism and Philosophy: Essential Readings, Theory, Reinterpretation and Application*, Westview Press, Boulder, CO, 1995, pp. 353–373.
- [10] K.J. Warren, *Ecofeminist Philosophy: A Western Perspective on What it is and Why it Matters*, Studies in social, political, and legal philosophy, Rowman & Littlefield Lanham, MD, 2000.
- [11] G.C. Gaard, *Ecofeminism: Women, Animals, Nature Ethics and action*, Temple University Press, Philadelphia, 1993.
- [12] S. Inayatullah, Causal layered analysis: poststructuralism as method, *Futures* 30 (8) (1998) 815–829.
- [13] P. Kelly, In occupied territory: future.com, *Futures* 34 (6) (2002) 561–570.
- [14] D. Desser, Race, space and class: the politics of cityscapes in science–fiction films, in: K. Annette Kuhn (Ed.), *Alien Zone II: The Spaces of Science–Fiction Cinema*, Verso, London, 1999, pp. 80–96.
- [15] M. Barker, A. Thomas, *From Antz to Titanic: A Reinventing Film Analysis*, Pluto Press, London, 2000.
- [16] G. Turner, *Film As Social Practice*, third ed, Studies in Culture and Communication. Routledge, London, New York, 1999.
- [17] T. Schatz, The return of the hollywood studio system, in: *Conglomerates and the Media*, The New Press, New York, 1997, pp. 73–106.
- [18] Columbia, Journalism Review, Who owns what. Retrieved October 2005, <<http://www.cjr.org/tools/owners/>>.
- [19] Centre for Public Integrity. Retrieved Oct. 2005, <<http://www.publicintegrity.org/>>.
- [20] G. King, K. Tanya, *Science Fiction Cinema: From Outerspace to Cyberspace*, Short Cuts, Wallflower Publishing Limited, London, 2000.
- [21] N. Hopkins, Movie budgets reach for the sky. Retrieved March 5, 2005, TimesOnLine.
- [22] L. Gamman, M. Margaret, *The Female Gaze: Women As Viewers of Popular Culture*, Women's Press, London, 1988.
- [23] S. Tepavcevic, L.S. Susan Ness, H.J. Kathleen, The glass ceiling in the executive suite, The Second Annual APPC Analysis of Women Leaders in Communication Companies, The Annenberg Public Policy Center of the University of Pennsylvania. On-line at <<http://www.appcpenn.org/women/telecom/>>, 2003.
- [24] Martha M. Lauzen, Executive Summary—The Celluloid Ceiling: Behind-the-Scenes Employment of Women in the Top 250 Films of 2004. Retrieved December 2005 at <<http://www.wif.org/docs/99.htm>>.
- [25] Center for Digital Minorities and the Media Democracy. Little Ownership and Even Less Control. <<http://www.democraticmedia.org/news/marketwatch/>>, 2002.
- [26] I. Milojevic, I. Sohail, Futures dreaming outside and on the margins of the western world, *Futures* 35 (5) (2003) 493–507.
- [27] P.X. Feng, False and double consciousness: race, virtual reality and the assimilation of Hong Kong action cinema in the matrix, in: S. Ziauddin, C. Sean (Eds.), *Aliens R Us; The Other in Science Fiction Cinema*, Pluto Press, London, 2002, pp. 149–163.
- [28] Brooks Landon, The aesthetics of ambivalence: rethinking science fiction film in the age of electronic (re)production. *Contributions to the Study of Science Fiction and Fantasy*; no. 52, Greenwood Press, New York, 1992.
- [29] S. Bukatman, The artificial infinite: on special effects and the sublime, in: A. Kuhn (Ed.), *Alien Zone II: The Spaces of Science–Fiction Cinema*, Verso, London, 1999, pp. 249–275.
- [30] L. Forster, Futuristic foodways, in: L.B. Anne (Ed.), *Reel Food: Essays On Food and Film*, Routledge, New York and London, 2004, pp. 251–264.
- [31] S. Ben-Tov, *The Artificial Paradise: Science Fiction and American Reality*, Studies in literature and science, University of Michigan Press, Ann Arbor, 1995.
- [32] I. Milojevic, Learning from feminist futures, in: H. David, S. Richard (Eds.), *Futures Education*, Kogan Page Limited, London, 1998, pp. 83–95.
- [33] Dreamworks, Twentieth Century Fox and, Minority Report <<http://www.minorityreport.com/>>, 2005.
- [34] S. Rampton, S. John, *Trust Us, We're Experts!: How Industry Manipulates Science and Gambles with Your Future*, Jeremy P. Tarcher/Putnam Press, New York, 2001.
- [35] J. Russ, *To Write Like a Woman: Essays in Feminism and Science Fiction*, Indiana University Press, Bloomington, 1995.
- [36] I. Milojevic, *Educational Futures: Dominant and Contesting Visions*, Routledge, London and New York, 2005.
- [37] V.C. Sobchack, *Screening Space: the American Science Fiction Film*, Ungar, New York, 1988.

- [38] D. Peary, Directing alien and blade runner: an interview with Ridley Scott, in: D. Peary (Ed.), *Omni's Screen Flights/Screen Fantasies: The Future According to Science Fiction Cinema*, Doubleday, New York, 1984, pp. 293–302.
- [39] N. Jewison, *This Terrible Business Has Been Good to Me: An Autobiography*, Key Porter Books, Toronto, 2004.
- [40] W. Irwin, *The Matrix and Philosophy: Welcome To the Desert of the Real Popular culture and philosophy*; v. 3. Open Court, Chicago, IL, Great Britain, 2002.
- [41] M. Kingwell, *The World We Want: Restoring Citizenship in a Fractured Age*, Penguin, Toronto, 2000.
- [42] H.B. Franklin, Don't look where we're going: visions of the future in science fiction films, 1970–1982, in: G.E. Slusser (Ed.), *Shadows of the Magic Lamp: Fantasy and Science Fiction in Film*, Southern IL, University Press, Carbondale and Edwardsville, 1985, pp. 73–85.
- [43] Z. Sardar, W.D. Merryll, *American Terminator: Myths, Movies and Global Power*, The Disinformation Company Ltd, New York, 2004.
- [44] George Lucas, Charlie Rose interview, PBS television, September 9, 2004.
- [45] J.W. Nelson, The apocalyptic vision in American culture, in: L.P. Zamora (Ed.), *The Apocalyptic Vision in America: Interdisciplinary Essays on Myth and Culture*, Bowling Green University Popular Press, Bowling Green, OH, 1982, pp. 154–182.
- [46] R.C. Cumbow, *Survivors: the day after doomsday*, in: D. Peary (Ed.), *Omni's Screen Flights/Screen Fantasies: The Future According to Science Fiction Cinema*, Doubleday & Company, New York, 1984, pp. 35–42.
- [47] P. Guber, Frontline interview, PBS on-line.
- [48] W.W. Dixon, *Visions of the Apocalypse: Spectacles of Destruction in American Cinema*, Wallflower, London, 2003.
- [49] F. Polak, *The image of the future*. Elise Boulding, translator. The Jossey-Bass/Elsevier international series, San Francisco, 1961.
- [50] C. Merchant, *Reinventing Eden: the Fate of Nature in Western Culture*, Routledge, New York, London, 2003.
- [51] S. Bok, *Common Values*, Paul Anthony Brick lectures, University of Missouri Press, Columbia, MO, 1995.
- [52] H. Zinn, *The optimism of uncertainty*, in: P.R. Loeb (Ed.), *The Impossible With Take A Little While: A Citizen's Guide To Hope in a Time Of Fear*, Basic, New York, 2004, pp. 63–72.
- [53] D.H. Meadows, L.M. Dennis, R. Jørgen, *Beyond the Limits: Confronting Global Collapse, Envisioning a Sustainable Future*, Chelsea Green Publisher, Co., Post Mills, VT, 1992.
- [54] D. Korten, *What's an economy for?*, in: D.G. John (Ed.), *Take Back Your Time: Fighting Overwork and Time Poverty in America*, Berrett-Koehler Publishers, Inc., San Francisco, 2003.
- [55] M. Mies, *The need for a new vision: the subsistence perspective*, in: M.a.V.S. Mies (Ed.), *Ecofeminism*, Fernwood Publications, Zed Books, Halifax NS, London, 1993, pp. 297–324.
- [56] H. Richter, R. Jørgen, *The Struggle for the Film: Towards a Socially Responsible Cinema*, Scolar, Aldersho, 1986.

Filmography

Source: Internet Movie Data Base <www.imdb.com>.

Aeon Flux, 2005.

Bladerunner, 1982, Director's cut 1992.

Epsilon (Alien Visitor), 1997.

The Fifth Element, 1997.

Minority Report, 2002.

The Matrix, 1999.

Rollerball, 1975.

Star Wars—Episode I—The Phantom Menace, 1999.