Mobility and Science Fiction

The present essay is divided into three parts:

(1) an Introduction about digitalization and the "Fourth Industrial Revolution,"[32] and, more specifically, offering initial ideas about self-driving cars as being an emblematic technology of our collective "cultural imagination" regarding the wide array of Next Generation advanced technologies which are upon us;
(2) a survey of six iconic science fiction films, plus one science fiction TV series, and how they visually and narratively represent "the car of the future"; which leads to
(3) a cultural theory conclusion presenting, as a thesis, my vision of how non-human "self-aware" technologies (now returning from the specific focus on the autonomous vehicle back to general consideration of many advanced "Industry 4.0" technologies) can, in partnership and in friendship with humans, help our species find a "posthuman" way out of fundamental problems like ecological catastrophe and the hegemonic social-technological systems of power and control over citizens.

Introduction

I find the term "digitalization" – in common currency among politicians and in the media today, for example, in Germany (*die Digitalisierung*) – to be confusing. The term seems to mix technologies of the past and of the future. In the 1960s, there were semiconductors and mainframe and minicomputers. There are personal computers and the graphical user interface (GUI) – Windows and the Mac – since the 1980s; the Internet since the 1990s; and mobile phones, smartphones, and tablets since the first decade of the twenty-first century. Now there is a vast new range or Next Generation of advanced digital technologies. A first attempt at listing them would include (and some of these are synonyms for each other):

- Artificial Intelligence (AI), automated software processes, self-learning self-evolving algorithms, Deep Learning and Big Data neural networks
- Robots, androids, and cyborgs

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

- Virtual assistants (like Siri and Alexa) and the smart home of the future
- Virtual Reality and the Metaverse
- Augmented Reality or mixed reality
- 3D Printing, Additive Manufacturing, new materials science
- Self-driving cars, mobility of the future
- Internet of Things (IOT) or ubiquitous computing
- Blockchain and other distributed ledger technologies, Smart Contracts, Decentralized Autonomous Organizations (DAOs), and cryptocurrencies
- Advanced biotechnologies, CRISPR gene editing
- Digital-neurological or Brain-Computer Interface (BCI)

Some of the special task areas where AI is increasingly successful and deployed: pattern (speech, images, facial) recognition and classification; language (generation, translation, conversation) processing; service (hotel, restaurant, cleaning, customer care) robots; online shopping prediction and personalized advertising algorithms; decision-making support; health care applications; and robotic process automation in hardware and software.

The First Industrial Revolution took place between the late eighteenth and early nineteenth centuries. The population of large cities grew exponentially. The steam engine was invented. The iron and textile industries flourished. Railroad networks expanded. Mechanical production in factories led to greater wealth and higher standards of living for some, but also to harsh living conditions for many. The Second Industrial Revolution occurred in the late nineteenth and early twentieth centuries. This revolution was largely driven by branches such as steel manufacturing, oil production, and electricity generation. Among the most important inventions of this period were the telephone, the lightbulb, the gramophone, and the automobile. The management strategies of the assembly line (Fordism) and scientific management (Taylorism) were incorporated into work processes. The Third Industrial Revolution, which began in the 1960s, has become synonymous with the digital revolution or the first wave of digitalization. This revolution heralded the transition from analogue electronic and mechanical devices to digital technologies.

The term "digitalization" accurately describes the technologies of the past several decades, like the automation of the office and factory work processes, and personal computers, the Internet, and smartphones. The administered and bureaucratic character of modern existence has already been supplemented for quite some time by computer technology deployed in social institutions ranging from schools and hospitals to the workplace and the home. The second wave of "futurist" technologies is better described with a term like the Fourth Industrial Revolution, hyper-modernism, or self-aware technologies.

It is the self-driving car – and the ways in which it has come to typify the advanced collective technological imagination in our media culture – on which I want to focus my attention here. The autonomous vehicle has become one of the primary exemplars symbolizing the wide spectrum of emerging self-aware technologies of Industry 4.0.

I want to say something about the past of cars – specifically the cultural history of cars – and the larger cultural-historical context of cars. I am interested in the representation

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

of cars in the cinema, especially science fiction cinema. And I will talk about self-driving cars, also known as driverless cars or autonomous vehicles.

My thesis about driverless or autonomous vehicles is different from what almost everyone else says about them. Almost everyone is talking about self-driving cars as a radical break, a paradigm shift, a quantum leap, a major step, a big change.

Yes, it seems to be that way: going from having a driver to having no driver. That is, if you look at technologies from the engineering perspective, from what I call the "technological determinist" point of view. Technological determinism asks the question WHAT IF. What will happen IF we make the so-and-so breakthrough? If we make a given breakthrough, if we implement a given technology. What will happen if there are sex robots, if there are cryptocurrencies, if there is Virtual Reality, if there are tiny nanobot surgeons, if we have human genetic engineering, if have the Brain-Computer Interface, if we have driverless cars?

The alternative to the technological determinist point of view is the design point of view. In design, one asks the question HOW, not IF. There are many possibilities, many different options of how a given technology can be designed, and then implemented.

My argument is that self-driving cars are going to be a continuity with what cars have been in the past, in the twentieth century. Not a radical break. IF autonomous vehicles get implemented without much design thinking. If they get implemented in the mainstream way.

Self-driving cars are probably going to be a continuity. Yet the present conjuncture of autonomous mobility technologies offers us the opportunity to initiate a transformation. Self-driving cars can be designed as something good, something better than what we have had until now. But this can only be achieved if there is first an understanding of what cars are, of what they have been in cultural history. Only after there is this cultural and historical knowledge can autonomous vehicles be designed as an authentic radical break with the past.

(1) First: what do I think about cars?
(2) Second: how are cars portrayed in science fiction cinema?
(3) Third: what cultural theory conclusions about posthuman technologies and Artificial Intelligence entities do I draw from the investigation of the science fiction films?

The theory should emerge slowly and immanently from the stories themselves.

In the first introductory part of the three parts of the present essay, I will make three essential points. First, I will argue that we are living in a relatively sedentary – and not mobile – society. Second, by looking at two key past visualizations of self-driving cars in the visual culture of postmodernism and modernity – futuristic advertising images of the "tomorrow-car" in post-World War II consumer society, and early twentieth-century paintings of the view of the world from within cars by Henri Matisse – I posit that something can be learned about how autonomous vehicles were already pictured in our cultural past. Third, I will examine media-technology theorist Paul Virilio's idea of the automobile as "the Vision Machine," and how the imagination of the Vision Machine appears in both older and newer forms.

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

After that, I will go on to discuss the six paradigmatic science fiction films and their evocation of self-driving cars or "the car of the future." The films provide experiential narrative and visual evidence underlying the ideas which I lay out in the third and final section of the essay. Some of the pivotal interrelated elements of this "future design" vision:

(1) Post-humans helping humans – in a reciprocally learning exchange – to cope with some of the existential predicaments that humans face.
(2) The design of co-existence between human and non-human "actors" in economy and society.
(3) Reversing the negative fear-image of humans losing fundamental control to Artificial Intelligence of the self-aware computer HAL in Stanley Kubrick's epic science fiction film *2001: A Space Odyssey*.
(4) The emphasis in the design proposal for androids on their emotions, feelings, ethics, and embodiment.
(5) The granting of the rights to participate in the economy and to dispose over their own lives, and of some form of personhood, to non-human social actors.

We Do Not Live in a Society Where Mobility is Encouraged

In our society, mobility is not encouraged. We are stationary, sedentary, inert, immobile. We bring what is *there* to *here* via multimedia technologies. Yes, for purposes of work and business, and in the vacation-tourist industry, we are encouraged to move around. But – considering the predominant worldview, attitudes, and habits of the vast silent majorities in the Western countries – we do not like migration, immigration, migrant workers, and inter-cultural contacts. We have fixed addresses and nationalities. Dual citizenship is discouraged.

We do not want to acknowledge that large physical distances exist. The goal of the transportation revolution of the nineteenth century – *Planes, Trains, and Automobiles* (title of a 1987 comedy film starring Steve Martin and John Candy) – was the conquering of distance, the compression of space, the dampening of awareness of the reality of *here and there*.

The primary technological revolution of the twentieth century was not the transportation revolution. It was the revolution of the technologies of media images and telecommunications. See Paul Virilio's work on "speed and politics." See telecoms historian James Martin's books on "the wired society." See the media theories of McLuhan, Baudrillard, and Flusser. See Martin Heidegger's 1938 "media theory" essay "The Age of the World Picture").[33]

The world-historical developments of the culture of virtual images and high-speed network communications have contributed massively to our immobility, to our sedentariness.

In the twentieth century and beyond, my essential relationship to THERE, to peoples, places, events, and things which are not HERE is *to bring them to me*, to bring them from

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

THERE to HERE via telecommunications – or more precisely, COMPUNICATIONS, a word synthesizing computing and data communications.[34]

The idea that the visual image (the copy) of something is "as good as" the thing itself (the original) plays a major role in this bringing of everything which is physically "absent" to my "presence." Cars (and other vehicles of physical mobility), which seem to go from HERE to THERE, are a secondary technology with respect to the primary technology of the images of everything in the world being brought to me in my home via the media networks.

The Dream of the Tomorrow-Car

The dream of what we will do once we have self-driving cars is, in fact, a longstanding established dream. It is the continuity of an old dream. You can see it in the famous American 1956 magazine advertising image shown below. We will bring our home with us everywhere we go. We want to feel at home everywhere. We want to have all our comfortable and familiar stuff with us – our family and our belongings. We do not really want to experience distance, to experience being truly somewhere else – the "otherness" of distances or faraway places or different cultures. We want to ignore and conquer distances.

We see here two different versions of this fantasized image of the mobility of the future. One is black-and-white and the other is color. The second version is from 1974. It was drawn by Günter Radtke, a German illustrator and newspaper cartoonist, and one of the founders of *Stern* magazine. This color image of the futurist self-driving car was part of the illustration work that Radtke did for the publication of Ulrich Schippke's book *Zukunft: Das Bild der Welt von Morgen* ("The Future: An Image of the World of Tomorrow").[35] Radtke's images portrayed, among other imagined future scenarios, transportation technologies in various contexts and domains. With regards to intellectual property and the creative diverting" (the Situationist artistic-activist practice of *le détournement*) of an artefact, one can note the striking similarity of Radtke's drawing to the original 1956 advertisement.

In the color version, the son is missing from the scene of the nuclear family. The second female looks older, and she is perhaps not the daughter of the family. Notice the large, enclosed glass room in both versions. Notice the car driving perfectly along the dotted line in the lane (guided by electrical power), and the lack of congestion on the highway. The car as a substitute for or annex of the living room of the home. Instead of genuine mobility, I take my stationary and familiar "at home" environment along with me on the road.

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

Image accompanying a sponsored article paid for by America's Independent Electric Light and Power Companies in the June 1956 issue of Boys' Life Magazine

Illustration by Günter Radtke from the book Zukunft: Das Bild der Welt von Morgen (Bertelsmann, 1974)

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

Le Pare-brise: Sur la route de Villacoublay ("The Windshield: On the Villacoubly Road"), Henri Matisse, 1917

Henri Matisse Paints "the Vision Machine"

There are two paintings made by the French painter Henri Matisse, from 1917 and 1925, respectively, which depict the view of the world as seen through the front windshield of a driverless car. The 1917 painting is called *Le Pare-brise: Sur la route de* Villacoublay ("The Windshield: On the Villacoubly Road"). The 1925 painting (not shown here) is called *Antibes, Paysage vu de l'Interieur d'une automobile* ("Antibes, landscape seen from inside an automobile"). These two paintings were made one hundred years ago, there were already cars back then, there was already the idea of a self-driving car and, more importantly, a statement made about how the experience of driving and speed transforms how we see the world.

In the painting, there is no human driver. The automobile is an apparent actor in the world, a kind of non-human actor. What we see here is that the car is a VISION MACHINE (the title of a book by French technology theorist Paul Virilio[36]). The car sees for us. Its vision or imaging apparatus replaces – or perhaps transforms – the human visual perception system of my eyes. When you are moving at speed, you cannot see the trees or the landscape in the same way that you saw them before. You become detached from them, entering more into a mediated relationship of spectator to spectacle.[37] In the 1982 science fiction film *Blade Runner*, the last surviving escaped Nexus-6 android replicant Roy Batty says to the genetic eye designer Hannibal Chew: "If only you could see what I've seen with your eyes."

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

The perceptual experience of seeing, of looking out the window of the high-speed car or the high-speed train, is a cinematic experience. It is just like a film. The world is passing by at so many frames per second. The experience of driving can be brought into relationship with the visualities of cinema, television, and the computer screen (and the immersive Virtual Reality which is coming). Driving a car is like going to a movie. The merging of windscreen and cinema screen. Three-dimensional digital video images of sunny landscapes will be projected outside the passenger window by the car computer as I drive through the country on a rainy afternoon. Notice the long horizontal line that Matisse has drawn in the middle of the windshield, to ensure that we take note that a glass is there.

The New Vision Machine

Today there is a new Vision Machine. The technologies that needed to make the self-driving car – the sensors and cameras, the Global Positioning System (GPS), the navigation system, the range finders and the radar, the ground-sensing LIDAR (light detection and ranging) technologies, along with the self-learning algorithms, artificial neural networks, Big Data, and image recognition and classification of Deep Learning AI – are again, one hundred years later, the technologies of the VISION MACHINE. This is one of the step-by-step ways in which the succession of media "hyperreality" proceeds: What was at first a cultural experience or paradigm, an embodied metaphor, the analog technology version (in this case, the VISION MACHINE), later upgrades into the literal programmed-engineered hyperreal version (all details filled in) as enabled by the second wave of digitalization or Fourth Industrial Revolution.

As Paul Virilio wrote in another book of his *Polar Inertia* (1990):

> How can one fail to grasp that tomorrow's transport machine will be a 'driving-computer', in which the audiovisual feats of the electronic dashboard will prevail over the optical qualities of the field beyond the windscreen?[38]

In *The Vision Machine* (1988), Virilio wrote presciently about the potentiality of Computer Vision that is today being realized by the maturation of Deep Learning algorithmic systems of AI and other "simulation of surveillance" technologies:[39]

> Aren't they also talking about the new technology of 'visionics': the possibility of achieving sightless vision whereby the video camera would be controlled by the computer?[40]

Virilio foresaw the time when the analysis of "objective reality" will be delegated to a machine. Images will be created *by the machine and for the machine* in future industries of the automation of perception. In the politics of the hyper-modern media society, the clear distinction between "true" and "false," the sense of certainty of the existence of facts, is disappearing as Donald Trump masters the Orwellian system of "beyond truth and lies," declaring to his supporters: "What you are seeing and what you are reading is not what's happening."[41]

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

It is Hollywood and Silicon Valley which are investing heavily in the advent of self-driving cars. Google and Tesla are working on self-driving cars. The film and TV and computer industries are busy making deals with automobile manufacturers. What am I (the consumer) going to do with the newly freed one hour of free time (which Audi AG calls "the 25th Hour"[42]) in my day that I am going to win back by not having to concentrate on driving? I will watch movies and TV series. I will play video games. I am going to telework and telecommute and teleshop. I am going to be wired and to consume multimedia infotainment.

The windows of the car are going to become screens, or at least dual-purpose physical and virtual media. Looking out the window was already a media transformation of "the real," and this metamorphosis will advance further from a cinematic experience to a Virtual Reality experience. Images of virtual driving experiences – the Arizona desert, the Swiss Alps, car chase in San Francisco, New York City taxi driver, African Safari, driving on Mars, or being a Formula One racer – will be projected onto those screens as the car becomes a new gaming platform. Characters in stories or Virtual Reality avatars might enter the car as three-dimensional living being-images through holographic technology.

Now I will discuss the six SF films. The retelling of one selected scene or clip from each film performs a phenomenological approach of the theory coming intrinsically into view from the experience (from, as the philosopher Edmund Husserl said, an engagement with "the things themselves"). It is also valuable to retell the cinematic narrative (in a trans-media act) in the media of words. The theory presented at the end of this essay is the project of what I call Technological Anarchism: envisioning post-humans as partners and friends to humans, as participants in the post-capitalist "third dimension" of the economy to which we delegate some of our human power, as autonomous or "self-owning" self-aware technological entities, as rights are granted to AI beings to dispose over their own lives.

Close Encounters of the Third Kind: The Menace of Verticality

In the 1977 science fiction film about first contact with aliens *Close Encounters of the Third Kind*, directed by Steven Spielberg, the character Roy Neary (played by Richard Dreyfuss), an electric company lineman blue-color worker in Indiana, is driving his job-related pickup truck at night on a rural road, investigating a series of power outages, when a strange intense light appears above him and his vehicle.

Sitting at his cabin steering wheel, Neary stops his truck in front of a railroad crossing and checks an electrical diagram of the wiring in the immediate geographical area. Behind him, an array of very bright circular lights appears, seemingly belonging to another vehicle. Neary motions with his hand to the unknown other, whom he believes to be the driver of a car or truck, to drive on past him. The assembly of bright lights surprisingly rises vertically, as seen by the movie viewer, while Neary continues to focus his gaze on the technical map-diagram.

He hears a rattling noise, growing louder when he opens his side-view window. It is a row of roadside metal mailboxes shaking. He shines a flashlight on the mailboxes, and their front lids all open. A blinding white light from overhead spotlights directly onto the

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

truck. The viewers have a clear view of the light. From within his cabin, Roy Neary cannot see what is happening in the vertical dimension above his truck. Gasping palpably with fear, Neary pokes his head out the window and looks above but cannot make out what is up there.

Blinded by the light, he retreats his head inside the cabin. The RAILROAD CROSSING sign – an iconic semiotic object of American culture and everyday life stuck routinely into the ground – makes an uncontrollable ringing noise and sways rhythmically from side to side. Physical debris shatters and crashes through the front windshield. Objects of all kinds blow around wildly in the cabin. Dashboard control gauges of temperature, fuel level, voltage, and speed go berserk. The ashtray full of cigarette ends explodes. The radio comes on at full blast. Suddenly all goes still, dark, and quiet again. After a long, pregnant pause, Neary looks to the darkened sky and sees the Unidentified Flying Object (UFO).

In science fiction films in general, extraterrestrial aliens are a symbol of the non-human, of the crisis that threatens to destabilize and overwhelm the liberal humanism of Western civilization of the last two centuries, the twilight of man's anthropocentric domination of nature and dominion over the planet. Aliens represent what in cultural theory is called the perspective of the posthuman. In contrast to the horizontality of the car (or, in this case, the truck), Neary-Dreyfuss cannot see what is overhead, cannot focus visually on the menace of verticality. He cannot discern the threat, except as a blinding light. Everything is shaking: the mailboxes (communication), the radio (the media), the railroad crossing sign (the signifier of mobility). The horizontality of the transport vehicle is threatened by the verticality of what it has excluded.

As Michel Foucault noted in 1966 in his Preface to *The Order of Things*, while discussing "the Death of Man," the grounds of our humanist certainty "is once more stirring under our feet."[43] Foucault identified a moral and epistemological crisis. He argued that the universalist claims of the modern Western worldview are self-contradictory. The world-historical assumptions about "Man" developed in the specific historical context of modern Western European history. They privileged the white male heterosexual Judeo-Christian individual liberal human subject. The eighteenth and nineteenth centuries in Europe were the heyday of the "grand narratives" (Jean-François Lyotard, *The Postmodern Condition*[44]) of modernity, the belief in a teleological (displaced eschatological Christian narrative) view of world history: the narratives (for example) of progress, Enlightenment knowledge, science, rationalism, democracy, the industrial revolution, capitalism, socialism, and communism.

The car or truck, with its essential horizontality, can be viewed as the classic vehicle of individualist liberal humanism. The freedom of the private vehicle, of endless open space, the sensation and experience of speed, the road trip, the open road. The car is the ultimate symbol-object of postmodernity, of the post-World War II consumer society, of America. Driving is part of a hybrid technology, of a hybrid-cyborg multimedia experience, human merging with machine. "Gliding down the freeway," writes Jean Baudrillard in his book America, "smash hits on the Chrysler stereo, heat wave."[45] Driving is hybrid with music and with the heat wave. Instant acceleration with the Chevy Corvette Stingray V8 engine, easy and fluid like a song on the radio. Driving is sailing, taking a break from the tasks of dry land.

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

The founder of media theory Marshall McLuhan saw the car of the past and the present as having contributed to the uniformity of America. In the cities, in the suburbs, and in rural areas, everything in America looks more and more the same – the same shopping malls, fast-food chains, gas stations, and corporate plazas. "For forty years," writes McLuhan in Understanding Media, the car has been "the great leveler of physical space and of social distance as well." The car, continues McLuhan, has created highways and resorts "very much alike in all parts of the land," spreading everywhere "the automobile version of civilization."[46]

The "car of the future" might flexibly alter its planar orientation between horizontal and vertical. It could transform its shape as it exits the highway and enters the city. When in the city, it might only be 55% as wide as today's cars. It transforms into a double-decker with four passenger compartments: lower front, lower rear, upper front, and upper rear. Each compartment is as wide as a golf cart and can comfortably accommodate one or two people. Up to 8 people can ride in the car. There is a retractable electric stoop on the exterior of the car that goes up and down like an elevator platform, enabling access to the upper compartments. The engine turns vertical or is small enough to not need to be rotated.

Above the roof of the horizontal vehicle is the opening to the universe, the verticality of a symbolically depicted posthuman future. The extra-terrestrial aliens in science fiction films are a metaphorical threat to liberal humanist anthropocentrism. The aesthetic of SF aliens is close to that of monsters, to the literary and moving images tradition of the grotesque. Science fiction is often "hybrid" with the horror genre. This is clear in films like Ridley Scott's *Alien* series. The aliens of *Close Encounters of the Third Kind* turn out to be childlike and playful.

The "Spinner" Flying Cars of *Blade Runner*: Simulation and Surveillance

Philip K. Dick's novel *Do Androids Dream of Electric Sheep?* was adapted into Ridley Scott's cinematic masterpiece *Blade Runner* (1982).[47] In his vast science fictional *oeuvre*, Dick employs the terms robot and android (as well as "replicant" and "andy") interchangeably. He explores the theme of artificial life-forms in dozens of remarkable novels, stirring up unsettling questions about the nature of that species called "humans" that builds androids.

The job of Blade Runner Rick Deckard – played by Harrison Ford – is to weed out, hunt down, and terminate trespassing android replicants who have surreptitiously made their way back to decaying Earth society from their slave labour assignments in the "off-world colonies" or on space exploration expeditions. The name Deckard is reminiscent of the seventeenth-century philosopher René Descartes who fatefully established the archetypal mind-body separation in Western philosophy ("I think, therefore I am"). Deckard is a post-Turing Test expert at distinguishing android "skin jobs" (a racist term used by his ex-boss Captain Bryant – played by M. Emmett Walsh) made by advanced biotech companies like the Tyrell Corporation from humans. The resonating message of the film of ideas *Blade Runner* is that *we are all replicants*. To be a replicant (in one important sense) – someone who must continuously conceal who he or she is – is a metaphor for being a non-conformist or living a subaltern condition. In the high-tech society of simulation

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

and surveillance, everyone is potentially always being watched by the power architectures of social control.

Deckard has already retired from his career with the police, but he is called back to duty by Bryant to handle a difficult case which no other detective can crack. While eating sushi and noodles at the White Dragon outdoor bar in the rainy weather and darkness of future Los Angeles, Deckard is detained by police detective Gaff – played by Edward James Olmos, who takes him in the flying police car known as "the Spinner" to the police headquarters at the summit of a skyscraper. The Spinner lifts off as a combined film-and-mobility excursion lasting several minutes through the skies of the futurist cityscape. *Blade Runner* was influenced deeply by Fritz Lang's magisterial early science fiction film *Metropolis* (1927). Many SF films that came after *Blade Runner* have copied its look-and-feel.[48] It has also had a profound influence on video game designers.[49]

As the flying vehicle ascends, one sees ominously the word PURGE flash across the red-backgrounded information screen inside the Spinner. The term offers a hint of ethnic cleansing and the existence of a hierarchical society of power. On the ground of the overcrowded future city are "the little people," as Bryant calls them – those without money and who belong to racial and linguistic minorities, stuck on an Earth of environmental catastrophes and genetic diseases. Everyone who is healthy wealthy has emigrated to the outer space colonies.

There is smoke and haze in the air. Only the police have flying cars. Soaring in the higher-altitude zone, interspersed with camera shots of the vehicle's dashboard control panel, one sees skyscrapers, multimedia advertising screens the size of entire building façades, and the architectural Panopticon of power (see Michel Foucault's discussion in *Discipline and Punish* of the generalizing to all social institutions of Jeremy Bentham's nineteenth-century behavior-control system of permanent observation[50]), as illustrated by the skyscraper-top landing ports. The inhabitants of Los Angeles are menacingly watched all the time by the image of an Asian woman in an animated billboard on the side of a massive floating blimp. The goal of the Panopticon architecture is to encourage self-surveillance among citizens (which Baudrillard called "the strategy of deterrence").[51] The flying car, in its movements of verticality and hovering, denotes the present and future society of simulation and surveillance.

The advanced technological totalitarian society of the present and future uses informatics-intensive surveillance systems to control the population. These hyper-control systems are enhanced by simulations. The real is reproduced by models. As in *Minority Report*, simulation-surveillance systems detect crimes before they happen – by seeing everything that can be seen and recording everything that can be heard (the collecting of Big Data then fed into intelligent "pre-crime" digital and biotech Deep Learning algorithms).

Deckard uses the digital media technology of the ESPER computer system to do an analysis of a photo extended to three-dimensional space. As a detective, he inspects a room without being in the room. He is present in the room virtually through visual media. Today something like the ESPER system has been realized with dual photography and light-field photography, photography without a camera.[52] The light-field camera captures information about the light-field emanating from all physical surfaces, analyzing algorithmically the direction that the light rays are traveling in space.

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

The ESPER Machine is connected to the police computer system of total surveillance of all physical spaces, accessed from Deckard's apartment. Every physical space is always potentially under surveillance, part of the Panopticon, the system of total power through universal visibility, computer vision which simulates human vision as enabled through Artificial Intelligence Deep Learning neural network algorithms.

Blade Runner: We Are All Replicants

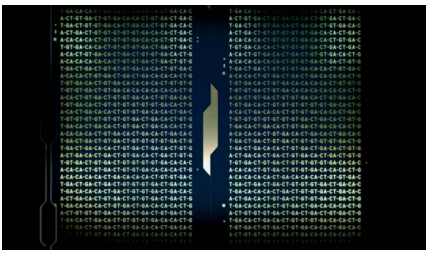
As the future-noir hard-boiled detective called back from retirement to handle an especially difficult case gets ready to administer the Voigt-Kampff empathic response exam to the female Tyrell android Rachael – played by Sean Young, his test subject asks him: "have you ever taken that test yourself?" Deckard asks CEO Eldon Tyrell – played by Joe Turkel: "how can it not know what it is?" That question applies as well to the sleuth's own situation. Rachael's eyes glow a faint red during her V-K trial, as do those of the combat model android Leon – played by Brion James. As Deckard steps out of the bathroom in his high-rise flat, one sees camera light bouncing off his slightly out of focus eyes.

Deckard examines Rachael's collection of photos from her childhood – media representations of her neurologically implanted memories which are copies of the personal memories of Tyrell's human niece. The photos are strewn about on Deckard's piano. "I don't know why replicants would collect photos," he comments in the voiceover. After the protracted showdown atop abandoned skyscrapers near the end of the film between Deckard and the last surviving escaped Nexus-6 replicant Roy Batty – played by Rutger Hauer, Lt. Gaff tells Deckard: "You've done a man's job, sir," as if the protagonist were not really a man. "It's too bad she won't live," continues Gaff in reference to Rachael, who is presumed to have only a four-year lifespan. "But then again, who does?" he obscurely adds.

Blade Runner, Ridley Scott director, Warner Bros., 1982

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

The uncertainty of Deckard's ontological status as human or replicant is brought out more forcefully in two scenes of *Blade Runner: Director's Cut* (1992), which restores an uncanny twelve-second dream sequence of a majestic silver-white unicorn running through misty woods, shown when Deckard nods off while playing the piano. Lt. Gaff, who makes origami figures, leaves the tiny tinfoil form of a unicorn on the floor just outside Deckard's apartment in the film's final moments. The juxtaposition of dreamland and decorative variants of the mythical equine creature in the two scenes delicately hints that the police authorities know the content of Deckard's dreams. His dreams, memories, and desires have been technologically implanted, just as he himself knew of Rachael's fake childhood recollection of the baby spiders outside her window.



Blade Runner 2049, Denis Villeneuve director, Warner Bros., 2017

Minority Report, Steven Spielberg director, 20th Century Fox, 2002

Director Ridley Scott expressed it in two interviews: "The central character could in fact be what he is chasing."[53] "[The] unicorn scene," Scott has also said, "would be the strongest clue that Deckard, this hunter of replicants, might actually be an artificial human himself."[54] Deckard is endowed with a secret destiny by the androids. The original human starts to imitate, and to be seduced by, that which he created as an imitation of himself.

Blade Runner 2049: Android Liberation Between Old and New Informatic Power

Blade Runner 2049 is a brilliant sequel to the original *Blade Runner*. Thirty years after the events of the narrative of the first film, the police discover evidence of the secret that Rachael, who was a replicant or android, became pregnant and gave birth in a "natural" fertility process to a child. Rachael died while achieving childbirth after a clumsy Caesarean section. There are three different groups or "camps" in the film, fighting against one another, each with a different perspective on the meaning and implications of the "scientific" and "forensic" knowledge of how replicants can reproduce and propagate themselves "biologically" rather than being manufactured in a factory. My "take" on the film is that android procreation is a metaphor for the much-anticipated fundamental breakthrough of the so-called singularity of General Artificial Intelligence. A replicant

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

female being able to give birth is the metaphor for that post-combinatorial paradigm shift in informatics and cyber-computational technology. The respective perspective of each of the three groups then represents an important attitude concerning the monumental advance of General AI. The film implicitly defines AI as the stage in computer science or biotechnology at which software code can write its own additional code.

Blade Runner K, short for his serial number KD6-3.7, also known as "Joe" (played by Ryan Gosling), works for the Los Angeles Police Department (LAPD). K's job is to hunt down older model replicants but is himself a sophisticated Nexus-9 replicant. The name K is perhaps a reference to the novels of Franz Kafka, such as *The Trial* and *The Castle*.[55] While "retiring" a rogue replicant at the beginning of the film, K finds a box buried under a withered tree at a protein farm. After a brutal hand-to-hand fight with the police detective and just before dying, the replicant owner of the protein farm admonishes K for being, so to speak, "on the wrong side of history" and cryptically says to him: "You've never seen a miracle." The box contains the skeletal remains of a female replicant who died during childbirth, demonstrating that replicants can reproduce biologically, which was previously thought to be impossible. A search of DNA records indicates that the deceased female is Rachael (from original *Blade Runner*). Powerful microscopic images show a replicant serial number engraved on one of the retrieved bones.

The first perspective of the three is that of the police. K's boss Lieutenant Joshi (played by Robin Wright) explains to him that the stability of society is maintained by the solid absolute wall that exists between humans and replicants, between those who have the right to life and self-determination, who were born "naturally," and those who are slaves, servants, or mere workers because they were built in a factory. The viewpoint of the police is that of preserving the old system of power, the established hierarchy between humans and androids. If the knowledge of android procreation, or even the fact that such an event occurred, would get out to the public, it could lead to a terrible war. To keep order, Joshi insists that all evidence and information regarding how Rachael procreated, including the very existence of the child, must be suppressed/destroyed. The replicant child must be found and retired. Lt. Joshi tells K:

> The world is built on a wall. Separate kind. Tell either side there's no wall, you bought a war. Or a slaughter. What you saw didn't happen. It is my job to keep order. That's what we do here. We keep order.

The second perspective is that of the Replicant Freedom Movement, of which the android prostitute Mariette (played by Mackenzie Davis) is a member. Freysa Sadeghpour (played by Hiam Abbass) is the leader of the freedom movement. When Freysa meets K towards the end of the film, she tells him that she helped deliver Rachael's baby. She held Rachael's hand while she was dying. The child was a girl. The goal of the Replicant Freedom Movement is the total liberation of their people. "That baby meant we are more than just slaves," Freysa tells K. "If a baby can come from one of us, we are our own masters." Mariette echoes a famous line uttered by Dr. Tyrell in the first *Blade Runner* film: "more human than human."

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

The third perspective of the three is that of the Wallace Corporation, the entrepreneurial successor to the Tyrell Corporation as the chief maker of replicants. The introductory text visually displayed at the beginning of the film tells us:

> Replicants are bioengineered humans, designed by the Tyrell Corporation for use off-world. Their enhanced strength made them ideal slave labor. After a series of violent rebellions, their manufacture became prohibited, and Tyrell Corp. went bankrupt… Wallace acquired the remains of Tyrell Corp. and created a new line of replicants who obey.

Prior to getting into the replicant business, Niander Wallace (played by Jared Leto) was already a wealthy industrialist, having made his fortune in synthetic farming. Luv (played by Sylvia Hoeks) is Wallace's evil replicant enforcer with super-strength and his right-hand top-level manager. Wallace instructs Luv to steal Rachael's remains and to follow K on his mission to locate Rachael's child, who should be thirty years old. Wallace laments that until now he has only been able to colonize nine planets. He is frustratingly dissatisfied and wants much more. He opines megalomaniacally in a lengthy monologue:

> We should own the stars. Every leap of civilization was built off the back of a disposable workforce. We lost our stomach for slaves – unless engineered. But I can only make so many. I cannot breed them. I have tried. We need more replicants than can ever be assembled, millions so we can be trillions more. Tyrell's final trick, procreation, perfected, then lost. If there is a child, bring it to me.

K must regularly submit to automated dialogical "baseline" tests to verify that he has not drifted psychologically towards becoming a "rogue" replicant. He contemplates the possibility that he himself is human. Perhaps he is the individual to whom Rachael gave birth thirty years ago. K goes to a records room at police headquarters to call up the DNA code of babies born on June 10th, 2021. The date 6.10.21 was carved into the tree trunk below which the box of Rachael's remains was buried. He remembers this date, which was on the wooden toy horse of his cherished childhood memory. DNA records indicate that twins were born on that date, but only the boy is listed as having survived.

Information about the child's fate leads K to an orphanage in apocalyptically devastated San Diego. However, written records from the year when the child was supposed to have arrived there are missing. Pages have been torn out from a fat physical notebook. K recognizes the layout of the orphanage from his memories and finds the toy horse where he recalls hiding it from bullying boys who were chasing him. Dr. Ana Stelline (played by Carla Juri), a designer of artificially implanted memories for replicants and an external contractor of the Wallace Corporation, confirms with her diagnostic tools that K's memories of the orphanage and the toy horse are "real," leading K. to conclude that he is Rachael's son. But this belief is short-lived. K travels to the ruins of Las Vegas where he meets Rick Deckard (played by Harrison Ford). Deckard explains that he is the father of the child. He scrambled the birth records to protect the child's identity, then left the child in the custody of the Freedom Movement.

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

The subject of code comes to the forefront in the scene where K visits the police DNA archive. In the viewer, he can see three DNA codes at a time side by side. Scrolling through the code of all infants born on the specified date, he finds two exactly matching genetic code sequences (differing only in the gender chromosome). But this is impossible – two persons cannot have identical DNA. One of the two must be fake. The records say that the girl died shortly after birth from a genetic disorder. The boy disappeared. K learns later that it was Deckard who manipulated the records to cover up traces of the replicant child's identity.

Rachael had a daughter. K now understands that he is not the child of Deckard and Rachael. He is devastated to find out that it is not him. He is "just" an android, manufactured in a biotech industrial process. Dr. Stelline has a compromised immune system and has had to spend her life, since age 8, behind glass in a sterilized space.

K drives Deckard to Stelline's office and hands him the toy horse to give to her since it is really her memory. She implanted the memory of the toy horse in the minds of many replicants whose memories she designed. As K lies on the steps, looking up at falling snow, Deckard goes inside and meets his daughter for the first time. As K dies, music from the original *Blade Runner* plays, reminiscent of the final scene of the death of Rutger Hauer's Roy Batty.

Minority Report: The Utopia/Dystopia of Surveillance Technologies

The literary richness of the science fictional text often emerges from the tension between utopian and dystopian visions of the future, which are often intertwined in storytelling and very closely related to each other. Steven Spielberg's landmark film *Minority Report* (2002) (based on the short story "The Minority Report" by Philip K. Dick[56]) weaves a complex narrative keeping the viewer on a knife's edge of suspense between politically ideal and nightmarish imagined future scenarios. Harnessing the special cognitive powers of three gifted mutated psychics known as PRECOGS who can "previsualize" the future, the police are able to intervene at the scenes of about-to-take-place murders and prevent violent crimes from occurring before they happen.

This technology of preemption is utopian in that it promises a world (the Washington, D.C. of 2054) where the murder rate has been reduced to zero. Yet the SF of *Minority Report* is dystopian both in the specific senses that one can be falsely accused (due to glitches in the PreCrime Brain-Computer Interface system) or falsely arrested (one may not necessarily go on to commit the crime) – and in the wider sense that the society depicted in the film is one of increasingly totalitarian surveillance. Everyone is under surveillance all the time, and privacy is effectively extinct. The autonomous cars of *Minority Report* are only autonomous in the sense that they do not require a driver sitting at a steering wheel to operate. The cars are part of a centralized network controlled by a centralized authority which universally observes, and acquires data on, each passenger. The police can take control remotely over your vehicle any time they like. Will autonomous vehicles be self-organizing (perhaps "self-owning") or will they be controlled by a centralized agency? Does free will cease to exist if the future is known in advance? Once individuals become aware of their future, are they then able to change it?

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

Minority Report was a milestone science fiction film in its "predictions" of new styles of design in human-computer interaction, and new advanced biotechnologies enabling personalized advertising. The film showed a multi-touch or "gesture" interface (more and more commonplace in the "real world" since 2002), which is the link to the "PreCrime" system and other police operations. Instead of being a "user," the new interface-experience paradigm that Spielberg wanted to highlight was that of being like a musical conductor leading and coordinating the music of an orchestra. Leveraging a universal optical recognition system, advertising applications are everywhere. They recognize both who you are (identity) and what is your current state of mind (conscious and unconscious intentions and desires).

The Toyota Lexus 2054 concept car was designed especially for the film as commissioned by Steven Spielberg. Other futuristic car models also appear on the highways and local roads of *Minority Report*. These self-driving vehicles glide smoothly along, make a distinct whirring sound, and intelligently preempt any possible traffic jams. The computer animation-supported filmed sequences of the self-driving cars play endlessly with the transitions between the vertical and horizontal dimensions in the transport logistics of the urban environment. The cars are called Magnetic Levitation Vehicles. They can hover above the road. They can bring the passenger directly to the entrance to his or her apartment. They can self-fuel and perform self-maintenance. Since his car is controlled by the police, Chief of Pre-Crime John Anderton – played by Tom Cruise – can only get away from the authorities who are hunting him by kicking out the side window and climbing out of the car.

The Fifth Element: When Manhattan has no More Ways to Expand

In the New York City of 2263, world government scientists in a laboratory (the Nucleo-Lab) reconstruct the humanoid alien woman Leeloo (played by Milla Jovovich) from the alien DNA of a severed hand encased within a metal glove, a weird piece of alien biology, which was the sole survivor of the destruction of the spaceship of the Mondoshawan "good aliens," who were decimated in battle by a mercenary Mangalore "evil aliens" spacecraft. The lump of flesh was retrieved by Earth security forces from inside the sarcophagus that was inside the wreck of the shattered ship. The alien biological tissue is said to be composed of a "fifth element" encapsulating the power of the other four classical elements (earth, water, air, and fire) into a miraculous divine light capable of defeating evil.

After her biotech generation into a humanoid female body form, Leeloo, wrapped in a thermal bandage dress, is initially held prisoner in a glass enclosure. But her superpowers include physical super-strength. She smashes open the glass, grabs a security badge from the startled General Munro of the Federated Army (played by Brion James), opens the encasement, and escapes from her confinement. She escapes from the laboratory complex.

Running away from the police, Leeloo flees through a tunnel system and stands on the high-up outside ledge of an upper floor of a skyscraper, looking out at the three-dimensional hyper-mobility system of 23rd-century New York City. Flying cars are whizzing

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

past on many horizontal levels of the complex architecture. Leeloo is shocked to see a high-speed train traveling vertically downwards along the side of a building. She walks around on the ledge, with a police hover car closing in on her, flashing a light on her, scanning her, and seeking unsuccessfully to retrieve a file on her from a database. She leaps off the ledge in an elegant, initially slow, diving motion, then pulled down at high speed by the force of gravity, crashing, many levels down, through the roof of the flying taxi of Major Korben Dallas (Bruce Willis), a former soldier in an elite special force unit of the Federated Army.

Writing about Los Angeles in his book *America*, Jean Baudrillard noted that that city "is in love with its limitless horizontality, as New York may be with its verticality."[57] With an ever-increasing population and confined by limited physical geographical expanse, New York City expanded vertically in the twentieth century with its world-renowned skyscrapers. Yet the ground surface of Manhattan remains an unresolvable system of congested circulation with its excess of automobiles with relatively few passengers on board, somehow still symbolizing the freedom of the individual in the America in which New York is embedded.

In the scene of Leeloo walking on the ledge of the upper floor of the skyscraper in 23rd-century Manhattan, we see that even the advent of flying cars has not dampened the implacable horizontality of American car culture. The horizontal mobility logic of the street has multiplied exponentially and expanded geometrically upwards to multiple levels of horizontal travel at the heights of the successive "stories" of the skyscrapers. The verticality of New York City skyscrapers has not combined with the potential of flying vehicles to liberate the mobility of cars from their vectorized vicious circle stagnation. Skyscraper verticality has been instrumentalized to infinitely extend the horizontality of the automobile. To avoid accidents and keep order, cars on each horizontal level are systemically confined within their lane.

Back to the Future: A Speed So Fast that the Laws of Spacetime Get Shattered

In the 1985 SF time travel film *Back to the Future*, directed by Robert Zemeckis, the eccentric scientist Dr. Emmett "Doc" Brown (played by Christopher Lloyd) invites his younger friend Marty McFly (played by Michael J. Fox) to meet him in the expansive parking lot of Twin Pines Mall in the town of Hill Valley at shortly after 1 a.m. on the night of October 25, 1985. After Marty's arrival at the parking lot on a skateboard, "Doc" Brown unveils, from the back of his van, his 1983 DeLorean DMC-12 automobile (a product of the short-lived DeLorean Motor Company, which produced cars in the early 1980s), which he has "souped up" and customized. Doc announces to Marty that he has invented a time machine from the modified DeLorean that runs on plutonium. He, Marty, and Doc Brown's dog Einstein are now going to observe and participate in "Temporal Experiment Number One." Doc straps Einstein with a seat belt into the front right-side passenger seat, checks that the digital clock around the dog's neck is synchronized with his own digital watch, and closes the gull-wing door.

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

Doc operates the car with a handheld remote-control device that has an extended antenna. "When this baby hits 88 miles per hour," Doc Brown says to Marty McFly, "you're gonna see some serious shit." He maneuvers the car into a starting position one hundred meters from where they are standing, sets it to achieve a speed of 88 miles per hour, and then "let's it rip." Wheels spinning and rubber squealing. The car accelerates to the designated high speed as it makes a beeline towards Doc and Marty. The flux capacitor gets activated. Electrical currents around the car body glow. A burst of light appears in front of the car. Just before potentially running them over, the DeLorean suddenly vanishes into a luminous flash of nothingness. Only fiery tire tracks remain in the path that the car was about to traverse. "Jesus Christ, Doc," Marty McFly says anxiously, "you disintegrated Einstein." Exactly one minute later, the DeLorean time machine vehicle and the dog Einstein reappear. The car's exterior looks worse for wear, but Einstein is alive and well. His clock is now exactly one minute behind Doc Brown's control watch, having traveled one minute into the future.

With *Back to the Future*, the speed-technologies of transportation mobility reach such a critical threshold or "event horizon" that the complete destruction of conventional or Newtonian spacetime comes metaphorically into view – scientifically, technologically, and culturally. Absolute speed renders time as virtual. With instantaneous transport and arrival, one can be anywhere and everywhere at any time.

The frontier possibilities that the laws of physics would open for time travel were first glimpsed in Albert Einstein's theories of special and general relativity, originally formulated in 1905 and 1915, respectively. Special relativity accommodated "time travel to the future." A passenger inside a spaceship traveling at a subluminal velocity close to the universe's limit-speed of light speed would exist in the private reality of a rate of time passage slower than that lived by her cohorts and progeny left behind on Earth. This was a revision of the classic Newtonian view that clocks proceed at the same pace everywhere in the universe.

According to Einstein, clocks inside the time machine traveling at close to light speed would appear to run more slowly than those on the outside, from the relativistic point of view of the motion and "proper time" of the outside observer. This time dilation effect, predicted by Einstein's special relativity equations, has since been verified by experiments conducted in upper atmosphere test pilot speed-flights, and by studies of the lifespans of subatomic muon particles in cyclotron-like accelerators. Enclosed in her "special relativity bubble," the time travel passenger could see time in the "outside universe" moving at a faster rate.

Total Recall: You're in a Johnny Cab

Another text by Philip K. Dick made into a Hollywood film was his short story "We Can Remember It for You Wholesale," adapted by director Paul Verhoeven into the 1990 film *Total Recall*.[58] For the current study, this is the third Dick Hollywood adaptation to be examined in "Mobility and Science Fiction," along with *Blade Runner* and *Minority Report*.

Douglas Quaid (played by Arnold Schwarzenegger) is a construction worker who has recurring nocturnal dreams about Mars and a mysterious woman whom he "knows"

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

there. While riding the subway one morning on his way to work, Quaid sees a TV advertisement for the company *Rekall*, a neuroscience-technology firm which sells memory implants of vacations at prices cheaper than "real vacations." Arrived at *Rekall*'s office, Quaid chooses the adventure vacation that includes him assuming a "secret agent" identity. But something with the memory implant goes wrong. The company technicians abort the procedure – or, at least, that is what appears to happen. Is the neural procedure gone awry "real" or is it the beginning of the virtual narrative inside Quaid's brain enacted by the secret-agent-vacation-adventure induced by the memory implant? From this point on in the narrative, through the construction of a Dickian plot device, neither the viewer nor Quaid knows if the rest of the film consists of (A) "real experiences" which are the unintended aftermath of the implant gone awry or (B) "virtual experiences" which are the intended repercussions of the memory implant. Neither the viewer nor Quaid knows if Quaid got up from the operation chair at *Rekall*, or if he is still sitting there in an unconscious mental state living his vacation. What is reality and what is hallucination?

The *Rekall* technicians sedate Quaid/Hauser and put him in a taxi. He wakes up and finds himself in the back seat of a self-driving taxi known as a "Johnny Cab" and has his first interaction with an AI robot who is the human-machine interface to the vehicle. "Johnny" is humanoid but embodies only a head and shoulders. He sits at the front left driver's position, and is whistling happily when Quaid/Hauser awakens from sleep and begins their dialogue:

Quaid/Hauser: Where am I?
Johnny: You're in a Johnny Cab.
Quaid/Hauser: I mean, what am I doing here?
Johnny: I'm sorry. Would you please rephrase the question.
Quaid/Hauser: How did I get in this taxi?
Johnny: The door opened. You got in. Hell of a day, isn't it?

As the secret agent who does not know his own identity – whether he is Douglas Quaid or Carl Hauser from Mars – the protagonist played by Schwarzenegger gets physically attacked and is pursued by armed men who want to either capture or kill him. Now carrying a suitcase which contains valuable information and artefacts about his past and future, with the pistol-brandishing bad guys in hot pursuit of him, Quaid/Hauser climbs again into the taxi:

Johnny: Hello, I'm Johnny Cab. Where can I take you tonight?
Quaid/Hauser: Drive! Drive!
Johnny: Would you please repeat the destination?
Quaid/Hauser: Go anywhere, just go, go!
Johnny: Please state a street and number.
Quaid/Hauser: Shit… Shit.
Johnny: I'm not familiar with that address. Would you please repeat the destination?

An exasperated Schwarzenegger uses brute physical force to wrestle the Johnny Cab android from its electronic socket connection to the base unit. Sparks and smoke fly. Arnold

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

tosses the robot aside. He takes over manual control of the vehicle, driving with a joystick. Quaid/Hauser/Arnold narrowly escapes his pursuers, who shoot gunfire at the back of the taxi. "Fasten your seatbelt!" exclaims the still partially activated Johnny robot, while lying in a supine position. Arnold drives away from the chase scene, and eventually brings the vehicle to a halt in an isolated dark alley. As he departs the taxi, the android resumes their dialogue:

> Johnny: The fare is 18 credits please.
> Quaid/Hauser (leaving the taxi): Sue me, dick head!

Johnny screams, the autonomous vehicle uncontrollably starts up again, crashes head-on into a wall, and explodes. As his charred face is about to get engulfed by flames, Johnny shouts out: "We hope you enjoyed the ride! Ha ha!"

The encounters with Johnny Cab are hilariously funny. They show the linguistic programming limitations of the conversational speech interface between humans and AI. And they show the crisis of the long tradition of the "getaway car" in cinema.

Schwarzenegger wants to GET AWAY from the authorities or bad guys who are chasing him, who are trying to capture or kill him. He does not have a specific destination. He wants to LEAVE HERE. The conversational flow interpreter of the speech interface of the self-driving car controlled by the AI software only knows the function of traveling to specific stated destinations. "SHIT," says Arnold. "I'm not familiar with that address," says Johnny.

Schwarzenegger says: "sue me, dick head." This cinematic moment provides a glimpse of the idea that is present in many Philip K. Dick stories and novels that self-aware intelligent entities in the future advanced technological society will have legal rights and responsibilities within the economic system. In the novel *Ubik*, you can be sued by an intelligent doorknob.[59] Given the Internet of Things, "sue me, dick head" is not only a joke – it could happen.

Robots Versus Androids

Presented with the situation of bringing robots or androids into our social world, I believe that we are being offered the precious gift of an opportunity for humanity to grow and develop. To have semi-living beings in our midst who both resemble humans and are different from humans is an opportunity to change ourselves. The human condition – looked at from the viewpoint of philosophy, theology, cosmology, or even cybernetic communications theory – is inherently difficult and disorienting. We are not getting any feedback from anyone or anywhere. Not even a simple OK, a confirmation, a yes or no response to our speech and our actions. Thumbs up or thumbs down. Our situation is a cosmic mystery. We do not know the origin of the universe or of life. We do not know why we are here, what is the purpose and the meaning of all this. What are we striving for? We barely know what we want. We are alone, staring into the communicational void. What humanity needs is an Other-who-is-no-longer-excluded-as-an-Other-yet-is-not-the-same-as-humans. We need a mirror, a partner, a friend. We need to establish

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

an I-and-Thou relationship (Martin Buber) with someone who has empathy with us, yet who has a decidedly different perspective on things.[60]

In his *Discourse on Method*, the seventeenth-century philosopher René Descartes described the universe as being clockwork and animals as being clockwork-like automata.[61] Animals are bodies, they have no soul. Humans are superior to animals, according to Descartes, because we have an independent mind or soul in addition to having a clockwork-like automaton body. A hyper-modern version of Descartes would judge robots to be soulless humans, humans minus a soul. This would then justify considering robots to be our servants.

If we make the mistake of retaining this work-oriented attitude towards robots, then we will keep alive an ideological system that has been around for a long time: the Fordist-Taylorist-capitalist system of humans serving the primary function in their lives of carrying out closely supervised work in processes of economic productivity. This system is not good for our health, happiness, well-being, or longevity. By thinking of robots as workers, we would reinforce our own status as workers. Instead of taking the opportunity to change in the direction of happiness.

The android perspective, on the other hand, is about humans growing to become more flexible and more embodied, as we learn from androids. Androids will have greater flexibility than humans have had until now, in both mind and body. Androids will teach humanity this new flexibility. Androids are animated. They are alive. Androids have emotions and feelings, like Data on *Star Trek: The Next Generation* who gets an emotion chip. Most human beings today, especially males, are not much in contact with their feelings and emotions. We can learn from androids how to become whole, not one-sidedly intellectual-rational. Androids are physical, as the Nexus-6 replicant Roy Batty says to the genetic designer J.F. Sebastian in *Blade Runner*. Androids are enchanting, seductive, theatrical, and magical.

Self-Owning Cars

It would be good to reverse the trend of the consolidation of power in the hands of very few giant corporations which the current state of online existence has become. The Internet in the 1990s was originally a pragmatic-utopian project of democratization and decentralization. Now it is controlled by Google, Facebook (Meta), Microsoft, Apple, and Amazon. The vision of self-driving-becoming-self-owning cars is a way forward, in the field of autonomous vehicles, to prevent the concentration of power in the hands of very few Silicon Valley and automobile industry companies. The design of blockchain projects and platforms in cyber-commerce and social media present a similar hopeful possibility.

The idea of self-owning cars was first put forward in 2013 by Mike Hearn, a bitcoin developer and former Google engineer.[62] The self-owning car would be its own "profit center," responsible for its own maintenance, costs, and revenues. The discussion of the philosophy and neuroscience of AI should be extended to the province of economics. A major factor for defining "self-awareness" is not "consciousness" but rather pragmatic participation in the economy and the environment. Self-driving cars can be programmed with moral algorithms to be ethical capitalists. We can code the rules we want into driverless,

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

self-owning, ecologically minded, self-sustaining vehicles. Privacy protection of human data is also a high priority.

Without the factor of human labor costs, self-driving cars will out-compete human-operated vehicles. Humans can own shares or invest in these mobility profit centers. Since autonomous vehicles can be on the road 24 hours a day, there will be fewer cars in circulation in cities – thus mitigating air pollution, energy consumption, and traffic congestion.

Enhance the Physical World

With Augmented Reality generally, we can reverse the decades-old trend of digital and virtual technologies being designed and implemented to escape from the phenomenological physical world, to ignore damage to the ecological environment, and to virtualize and simulate what is naïvely called "the real world." We can design and implement digital and virtual technologies, and the technologies of Industry 4.0, to enhance and support the physical world and to protect the environment – on one level the ecosystem, but also physical reality.

The conjuncture of self-driving cars presents the opportunity to design these vehicles to promote mobility, the awareness of distances, awareness of the physicality and experience of space, of the difference between HERE and THERE, encourage the appreciation of *otherness* and of *the destination*, to inspire us to really *go somewhere*.

If we do not carry out this alternative radical design, then human physical movement would cease to be important. Dynamic vehicles would give way to and be replaced by the static audiovisual "vehicles," marking the definitive triumph of sedentariness.

As we have seen in our review of the history of mobility in science fiction cinema, the automobile in our culture is endowed with a life of its own. The historical and futurist encounter between the cinema and the car takes place in the mode of creativity. As media and everyday life become indistinguishable from one another – life becoming film (or VR) and film (or VR) becoming life – our generosity towards the life of technological non-humans can be expanded to embracing their participation in our economy and our collective existence.

We face the challenge of designing the co-existence of human and non-human actors in society – and these non-human actors, in a way, might be defined as having personhood.

The Simulacra, Do Androids Dream of Electric Sheep?, and *Dr. Bloodmoney*

Philip K. Dick is the author of landmark SF novels such as *The Simulacra, Do Androids Dream of Electric Sheep?*, *Dr. Bloodmoney*, and *Ubik* (generally considered to be Dick's finest creation).[63] In *The Simulacra*, the president of the United States of Europe and America (USEA) is an android called "der Alte" who is often replaced by the next-in-line android figurehead. The de facto political leader of the future totalitarian society is the presi-

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

dent's wife and permanent First Lady named Nicole Thibodeaux. The "real" Nicole herself passed away years ago and she is impersonated by a succession of human actresses.

In *Do Androids Dream of Electric Sheep?* (the novel on which the *Blade Runner* films are based), humans remain morally superior to androids (they have the "human right to life" which androids do not possess) because humans can genuinely connect emotionally to the theological and ethical system known as "Mercerism." Only humans can fuse with the mythological persona of old man Wilbur Mercer, achieved by grasping the physical handles of the interactive TV-like black "empathy box" which brings up a visual image that then turns into a fully immersive Virtual Reality experience. Mercer is condemned to incessantly climb a hill with jagged stones beneath his feet while others hurl sharp-edged rocks at his flesh, only to be perpetually thrown back to the start when he reaches the summit. It is an echo of Albert Camus' manifesto of the absurd *The Myth of Sisyphus*.[64] Participation in Mercerism increases empathy among the general human population of the imagined future society.

In *Do Androids Dream of Electric Sheep?*, in the moment of completion of his endless Sisyphus-like cycle, Mercer is plunged back down into the desolation of the "tomb world." In *How We Became Posthuman*, Hayles interprets the tomb world as a manifestation of Dick's lifelong recurring bouts of psychological depression and mental illness. As a young man, Dick "had three nervous breakdowns and attempted suicide several times." The tomb world, for Hayles, is a fictional representation of Dick's extreme mental distress of dreariness and hopelessness "associated with a deep confusion of inside/outside boundaries."[65]

The scenario of *Dr. Bloodmoney: Or How We Got Along After the Bomb* unfolds in a post-apocalyptic California where an accidental nuclear fission explosion in the Earth's atmosphere has left humanity to deal with a world of radioactive fallout, austere living conditions, food and energy shortages, genetic mutations, mysterious illnesses, and hyper-intelligent animals. The character Hoppy Harrington is a homunculus who was a 1950s Thalidomide baby who began life with birth defects. He possesses artificial electronic servo-mechanical limbs replacing his missing arms and legs, the ability to perfectly mimic other individuals' voices, and psychokinetic powers. Having been poorly treated in interpersonal relations in his life prior to the nuclear holocaust, Hoppy seeks revenge against humanity through his intensifying efforts to control others via his mind-over-matter capabilities. His goal is to take command over the satellite broadcasts of beloved astronaut Walt Dangerfield – who, from his orbiting space capsule, helps to coordinate point-to-point communications on a technology-deprived Earth – and thereby exercise enormous influence over people's minds. As Dick noted in his 1980 Afterword to the novel, Hoppy Harrington "is incomplete, and he will complete himself at the expense of the entire world, he will psychologically devour it."[66]

The "Science Fiction World" of Philip K. Dick's *Ubik*

The novel *Ubik* is generally regarded as being Philip K. Dick's masterpiece. In this major literary work of 1969, the struggle to occupy an "outside" relative to the "inside" of a cybernetic-economic-technological-virtual system is poignantly illustrated. It is a sce-

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

nario where the "science fiction world" becomes everything, leaving the "safe confines" of a clearly defined literary space that is called a novel. Should science fiction be kept in its place as fiction? Should one feel threatened by the inclination of science fictional quandaries and disruptions to "become the world"? Or is the dualistic rational stance of inside/outside – anything other than letting SF "become the world" – ultimately a miscomprehension of what science fiction is? By letting it "be the world," does one risk becoming "lost" in science fiction?

In *Ubik*, with his imaginative invention of what is called "the Moratorium," Philip K. Dick has devised the space of a special kind of "science fiction world" as a laboratory or thought experiment where the questions about reality and fiction or outside and inside – and the relationship between the two poles of such dualisms – can be posed. Are these strange phenomena and circumstances happening in the world or is it my own madness? Is it happening in my mind? Dick's "Moratorium" is the "science fiction world" that deals with the difficult challenge of how to define an "outside perspective" with respect to the hegemonic social-technological system. The prevailing Marxist or "critical theory" view in Science Fiction Studies is that SF depicts modes of "cognitive estrangement" in successive phases of capitalism. This approach stays with the reassuring principle of an intact dis-alienating human subject (the scholar himself!) who critically opposes the technologically totalitarian system.[67]

In the future society of *Ubik*, when your body dies, there is still some life-energy and consciousness left within you which can be accessed communicatively by others. You can continue to have subjective experiences in a virtual or "pseudo" world. After you die, you can be put into cryogenic suspension. If properly cared for in a Moratorium, you can exist for years between life and death in a state of "half-life." Your loved ones can "commune" with you, say once a month, when you are periodically woken into the communication mode. Lengthy intervals between contact sessions ensure that your remaining life-energy gets stretched out. Towards the end, a technician of the Swiss Beloved Brethren Moratorium explains to wealthy business owner Glenn Runciter, whose wife Ella died very young at the age of twenty, how the technology of the communing mechanism works. The casket of the deceased is wheeled into a consultation room and her brain is hooked up to a cybernetic electronic circuit.

Joe Chip is a managerial-level employee of Runciter Associates, a "prudence organization" business which offers the service of protecting its clients from invasive acts by people with psionic and telepathic powers. Chip, Runciter, and their team of psi specialists are lured in their spaceship into a trap on the Luna moon by their business rival and arch-enemy Ray Hollis of Hollis Talents. A bomb explodes, and Glenn Runciter is seemingly killed while Chip and the others seemingly survive. Joe Chip, the protagonist of the story, believes that he is alive and Runciter is dead. But he soon comes to understand that the situation is exactly the reverse. Joe is hooked up to the system of the Swiss Moratorium. The apparent world around him which he visually perceives is a virtual world the epistemological status of which is unclear. However, the secret formula substance in a spray-can called "Ubik" is going to keep Joe sane and safe amidst the disorienting circumstance.

Joe experiences the progressive physical decay of the virtual world – a process which corresponds to his own accelerating loss of half-life. It was Joe Chip and his team who

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

indeed were fatally injured in the explosion on Luna. Runciter is outside and Joe Chip is inside. Is that "inside" a legitimate valid world or does it exist merely within Joe's mind? While inside the pseudo-world that resembles ordinary American life, Joe receives messages from Runciter on various media: the latter's voice on Joe's hotel room vidphone, the voice of the TV announcer, scrawls on matchbook covers and parking tickets, and graffiti on the wall of a public men's restroom that reads: JUMP IN THE URINAL AND STAND ON YOUR HEAD. I'M THE ONE THAT'S ALIVE. YOU'RE ALL DEAD.[68]

In the "science fiction world" in which Joe Chip finds himself, everything is deteriorating or retrogressing. All the cigarettes in the world are dried out or stale. Cream and coffee have turned rancid. The phone book is years out of date. Magazines are from a bygone era. Coins in your pocket transform to obsolescence. The world regresses to the year 1939, and then devolves further back in history. Elevators, automobiles, street trolleys, airplanes, telephones, clothes, music players, kitchen appliances – they are all substituted by antiquated versions of themselves from decades before. Then the decay starts to attack people. "On the floor of the closet a huddled heap, dehydrated, almost mummified, lay curled up. Decaying shreds of what seemingly had once been cloth covered most of it."[69] The predecessor to the aerosol spray version is the "Elixir of Ubique" liquid in a handmade flask that was made around the time of the American Civil War in the mid-nineteenth century. "Reality has receded; it's lost its underlying support and it's ebbed back to previous forms."[70]

Who Is Jory Miller and What is Ubik?

The cause of all this destruction is the evil adolescent selfishness of the half-alive half-dead teenager Jory Miller, whose cadaver is in close physical proximity to all the others. Jory sucks up or eats the life of others. Families place their deceased loved ones in the Moratorium to get some more life for and from them, but the half-lifers become victims who are cannibalized by a younger and stronger life-force through the act of "heteropsychic infusion." Jory passed away when he was only fifteen. The Swiss Beloved Brethren Moratorium, owned by Herbert Schönheit von Vogelsang, is indeed a corrupt capitalist enterprise. Ella explains this to Joe: "Herbert is paid a great deal of money annually by Jory's family to keep him with the others and to think up plausible reasons for doing so. And – there are Jorys in every Moratorium."[71] "I've been doing it a long time to lots of half-life people," Jory confesses. "I eat their life, what remains of it. There's very little in each person, so I need a lot of them. I used to wait until they had been in half-life a while, but now I must have them immediately."[72]

Each chapter of the novel *Ubik* has an epigraph which tells us something cryptic about the substance Ubik. What is Ubik? Ubik hints at the word "ubiquitous," meaning "everywhere" (think "ubiquitous computing"). Ubik is a universal commodity sold by consumer culture via the discourse of advertising. Ubik is: a silent electric vehicle; a beer; a coffee; a salad dressing; a pharmaceutical pill like aspirin that relieves headaches and stomach aches; a special brand of shaving razor blade; a household and kitchen cleaning substance; a debt-consolidation loan from a bank; a hair conditioner and a hairspray; a deodorant spray or roll-on; a sleeping pill; a breakfast food you can heat in the toaster; a

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

brassiere; a plastic wrap to keep food fresh; a bad breath freshener; and a crunchy cereal. Ubik is the universal semiotic quality shared by all objects, goods, services, and messages in postmodern society that makes you feel like a good cultural citizen who belongs to and participates in the greatness of it all!

Joe Chip's own physical deterioration reaches the point where he cannot walk up the stairs to his hotel room in virtual Des Moines, Iowa. He feels sick. He cannot breathe. His body is disintegrating. He has no strength left. But the process leading from half-death to his final death can be stopped by the Ubik spray, sent surreptitiously into the virtual world by his friends Glenn and Ella Ranciter. In the end, Joe receives the promise of a lifetime supply of Ubik (he can renew it every day in a pharmacy) which is going to enable him to survive in that virtual world, to protect himself from the predatory greed of Jory. Philip K. Dick provides a "pataphysical" explanation of how Ubik "really works":

> It is a portable negative ionizer with a self-contained, high-voltage, low-amp unit powered by a peak-gain helium battery of 25kv. The negative ions are given a counterclockwise spin by a radically biased acceleration chamber, which creates a centripetal tendency to them so that they cohere rather than dissipate. An ion field diminishes the velocity of anti-protophasons normally present in the atmosphere; as soon as their velocity falls, they cease to be anti-protophasons and, under the principle of parity, no longer can unite with protophasons radiated from persons frozen in cold-pac; that is, those in half-life.[73]

The world of the Moratorium in *Ubik* is both inside and outside. Joe Chip learns to abide in that world – just as Philip K. Dick learns to abide in the world of his creativity without going mad, and just as "science fiction theory" learns to abide in the world of its future vision.

Fredric Jameson on Postmodernism

In his highly influential book of 1991 *Postmodernism: Or, the Cultural Logic of Late Capitalism*, Fredric Jameson defined postmodernism as the era of the eclipse of modernist ideologies which were based on narratives which had the sensibility of leading towards a goal.[74] Many "premonitions of the future" are now declared to be over. In this regard, postmodernism is the "end of the end" or the disappearance of the sense of history itself. Jameson emphasizes the role of the mass media in strengthening what he calls capitalist hegemony in "colonizing" the consciousness and everyday lives of citizens. New aesthetic expressions of postmodernism are emblematized by Andy Warhol and pop art, the music of composers like John Cage and Philip Glass, and the cinema of Jean-Luc Godard. Jameson focuses on his primary example of architecture. The "high modernism" of Frank Lloyd Wright, Le Corbusier, and Mies van der Rohe is seen as having participated in damaging the traditional fabric of life of the city and its vivacious neighborhoods which were previously outside of capitalist strategies of control.

Postmodern architecture, according to Jameson, is a populist gesture of going beyond the disregard for mass culture which was the attitude of the earlier generations of

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

"critical theory" intellectuals involved with their defense of high culture. The idea of the integration of commercial culture into structural ambiances is best captured by Robert Venturi's *Learning from Las Vegas*.[75] Jameson's privileged case study is the Westin Bonaventure Hotel in Los Angeles designed by John Portman. The Bonaventure aspires to be a total space, an apparently complete world, a miniature city. The exterior reflective glass skin of the building

> repels the city outside, a repulsion for which we have analogies in those reflector sunglasses which make it impossible for your interlocutor to see your own eyes and thereby achieve a certain aggressivity toward and power over the Other… the glass skin achieves a peculiar and placeless dissociation of the Bonaventure from its neighborhood… you cannot see the hotel itself but only the distorted images of everything that surrounds it.[76]

Jameson the celebrity professor identifies with the inside perspective of the person wearing the sunglasses gaining power. The postmodern architecture of the Bonaventure is a hyperreality that absorbs energy from and impoverishes its encircling local physical "reality." The hotel guests, who belong to the privileged moneyed upper echelons of capitalism, are given the feeling of being in a high-tech space age nowhere space, in an unblemished futuristic-technologized décor, in utter safety and removal from the mundane urban surroundings. In his detailed analyses, Jameson succeeds in making a unified prescient commentary on postmodern culture in its context of multinational late capitalist economics.

Sonja Yeh on the Postmodern Media Theorists

In her comprehensive 2013 book entitled *Anything Goes: Postmoderne Medientheorien im Vergleich*?, Sonja Yeh undertakes the challenging task, and makes the amazing achievement, of bringing into comparison and systematizing the key concepts of the major postmodern media theorists McLuhan, Baudrillard, Virilio, Kittler, and Flusser.[77] Yeh's project is to investigate and articulate the commensurability of the ideational contents, structural features, and shared assumptions and conclusions among McLuhan's global village and the end of the Gutenberg Galaxy, Baudrillard's simulation theses, Virilio's "dromology" or historical science of speed, Kittler's media archaeology, and Flusser's "communicology." She seeks to develop a coherent structural framework which makes possible juxtaposition, resemblance, and dialogue among the different systems of thought. Yeh thematizes identity, communication, cognition, reality (*Wirklichkeit*), culture, and society as separate inquiries. All these thinkers deal with the role of the media in the transformation and transition processes between modernity and its beyond.

The Canadian Marshall McLuhan was the founder of worldwide media theory. Some of McLuhan's key ideas are "the media is the message" and the phenomenon of the worldwide networks creating a "global village" as the retribalization of humanity. McLuhan wrote about the break between book culture and electronic culture, and the vital connection between the book media and the development of sovereign individuality that is

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

necessary for democracy. For McLuhan, every new media/technology brings with it both a gain and a loss for humanity. The media theorist should be neither strictly a critic nor an enthusiast of the media at hand that she is examining. She should rather diagnose the effects and the positive and negative sides of the given media. In the 1960s, McLuhan already predicted the advent of the Internet. Television was, for McLuhan, a "hot" medium of involvement. The essence of advertising is the satisfaction that the viewer gets from the ad itself, not from the product. McLuhan took the methods of literature studies and applied them in a crossover way to media.

I discuss the key ideas of Baudrillard throughout this text. I discuss some of the key ideas of Flusser in the ninth publication ("The Software of the Future, or the Model Precedes the Real") revised and included in the book. I discuss the ideas about software and the history of computing of Kittler in the eighth publication ("Software Code as Expanded Narration").

Virilio's key concepts are speed and accident. The major technological revolutions of modernity were the transportation and telecommunications revolutions. What they had in common is that they both involved the conquering of distance, the shrinking of the physical span between point A and point B. I bring "here to there" at increasing speed with the transport technologies or "there to here" with the computer networks and the screen. I no longer need to go on an African Safari or physically travel to the Great Wall of China. I bring instead pictures of Africa or China to me in my living room. This is also the decline of physical movement.

For Virilio, every technology has a built-in accident waiting to happen. Progress and catastrophe are two sides of the same coin. The invention of the automobile was, at the same time, the invention of the car crash. The invention of the airplane was simultaneously the introduction to the world of the plane crash. Yet these accidents, intrinsic to technologies for conquering physical distance, remain "specific." They have only local/"limited" consequences within a conventional physical space. With virtual technologies and computer networks, we move towards the total or "generalized" accident, which can be much more devastating in its consequences. The accelerating speed of cyber-communications brings about a general crisis of space and time. Time is globalized through instantaneity. When we participate online in virtual space, we are no longer located in our actual physical space in a straightforward way. Virilio wrote about the interconnections between military and civilian media technologies, and about the relation between war and cinema or the "logistics of perception."[78]

Donna J. Haraway's "A Manifesto for Cyborgs"

Donna Haraway's text "A Manifesto for Cyborgs" was written in 1985, but it reads as if it were written yesterday.[79] A cyborg is a hybrid of living organism and machine. The cyborg is a person whose body has been supplemented by artificial components. The term is an acronym derived from "cybernetic organism." Most of us are already cyborgs: glasses, artificial teeth, artificial limbs, chips implanted to open doors or make payments. And all the metaphorical meanings of cyborg: we are merged with technologies; we sleep with our smartphones next to us at night. Haraway uses the phrase "the informatics of domi-

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

nation" to describe the hyper-modernist worldview that translates the entire world into a problem of software coding. Human bodies (especially female bodies) get coded or inscribed.

With biotechnology, bodies get manipulated by information processing. Haraway gives the term cyborg a positive utopian meaning as a figure of resistance against capitalist mainstream cybernetic systems. The cyborg in the sense of transformation is not searching for an identity but rather for affinities with kindred actors. She is intimately entangled with advanced technologies. Haraway points to feminist SF writing. She proposes that feminist theory take a new direction away from "identity politics" or the "essentialist" position that gender or being female is biologically based and clearly demarcated from the non-female. Not only SF, but also post-biological medical science "is full of cyborgs, of couplings between organism and machine."[80]

In biology, the organism is no longer the primary object of knowledge, having given way to biotic components as information-processing devices. In the cybernetics model, the centrality of information is what allows for universal translation among all idioms. The goal of the conversion-of-everything-into-information matrix is to eliminate in advance resistance to the rhetorical powers of governance. If informatic code is the prevailing parlance, then there are no more interpretations of discourses, and no more differentiating viewpoints.

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -

https://doi.org/10.14361/9783839472422-005 - am 13.02.2026, 07:26:40. https://www.inlibra.com/de/agb - Open Access -