



# The Past 100 Years of the Future

Human-Computer Interaction  
in Science-Fiction Movies  
and Television

**Aaron Marcus**

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**Author and Narrator/Guide**

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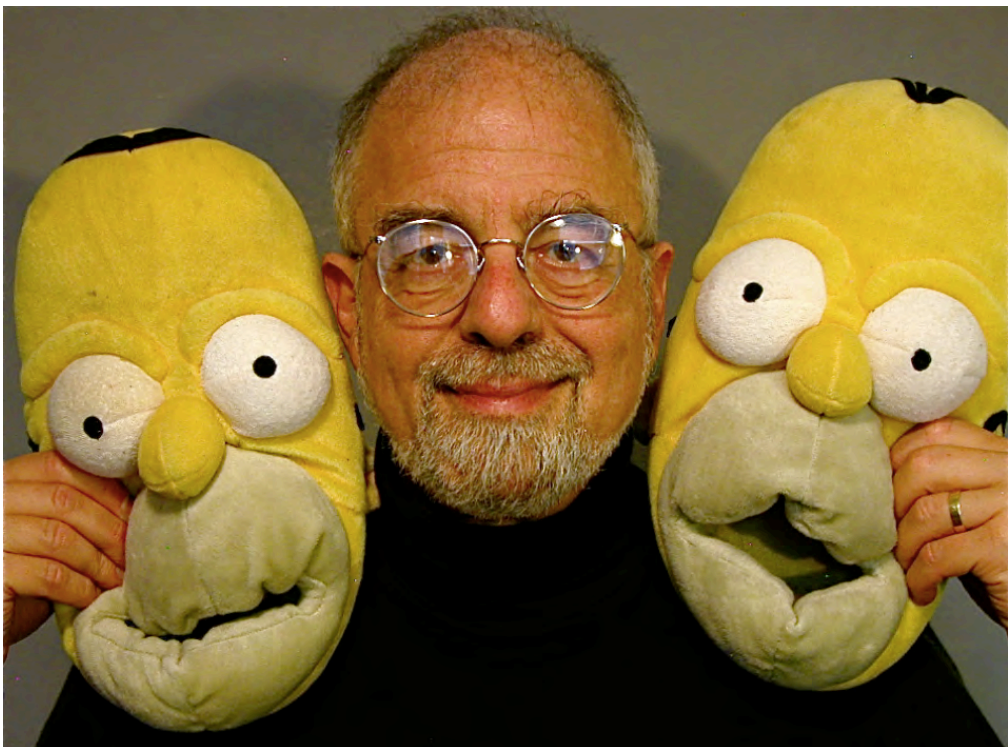
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**Note:** This version has been laid out in approximately 5.5" x 8.5" format to account for two pages being printed on 8.5 x 11 laserprinters, or A4 sheets in Europe and Asia. Each figure has been given its own page and caption for clarity and consistency. The figures are from the cited movies, television shows, and publications, with acknowledgement that the media are copyrighted works. To the extent possible, detailed information about the movies are provided in an appendix. The appearance of these images in this publication are according to fair use practices for purposes of review, criticism, and analysis.

**Author's bio:**

Aaron Marcus, President of Aaron Marcus and Associates, Inc., and Editor-in-Chief *Emeritus* of User Experience Magazine, is a pioneer of user experience design, publisher of eight books and more than 300 articles, former "Fast Forward" column editor of *Interactions* for five years, and first user-interface designer to be elected to both the HCI Academy and to the AIGA Fellows. He organized and chaired two plenary panel sessions about science-fiction and HCI at ACM SIGCHI conferences in 1992 and, by request of ACM/SIGCHI, in 1999, in which he invited leading science-fiction authors to speculate about the future of computer-human interaction. He has been a life-long reader of science-fiction books, magazines, and comics, and a viewer of science-fiction films and videos.

**Author's photo:**



***Figures: Aaron Marcus in a serious and funny mood.***

## Abstract

During the past hundred years, science-fiction (sci-fi) films and, later, videos, have, of necessity, had to depict detailed views of human-computer interaction (HCI) of the future, or alternate pasts/presents, in order to convey a compelling scene and, sometimes, in order to move forward the plot. This publication explores some of the themes that emerge from examining this body of work. The basic premise is simple: HCI professionals can learn something from sci-fi media, and sci-fi media-producers can learn more from HCI professionals in order to show smarter views of the future.

## Article Text:

### Sci-Fi and HCI: Past, Present, and Future

*"Greeting HCI/CHlons of the Planet Earth. I bring you a message of great import. May the Schwartz be with you in your quest for knowledge of excellent user experiences...."*

*So might the opening of the Academy Awards of 2014 for Human-Computer Interaction (HCI) in movies and videos begin...but such is not the case...In the meantime, please join with me in this romp through time, space, fiction, and reality.*

Movies and video programs of traditional broadcast media over the past hundred years have made extensive use of computer-human interaction in telling science-fiction stories that envision the future or alternate worlds of the past or present. In the following publication, I present a personal and roughly chronological essay. This survey provides examples of HCI included within movies and videos that I presented in my keynote address at the Mensch und Komputer Conference 2011 in Chemnitz, Germany. I am indebted to Prof. Dr. Maximilian Eibl and to Dr. Arne Berger for their invitation to present the results of my study (see the online video cited in the Bibliography).

I provide an early warning: This text is not an academic treatise, but more like a travelogue of past futures. Besides informing and entertaining you, I hope it will inspire PhD students worldwide and others to explore further the topics mentioned. My comments are a compendium of insights gained from viewing many of these works with an eye trained for decades to notice the details that inspire, frustrate, and inform us as user-experience (UX) and user-interface (UI) or human-computer interaction (HCI) design professionals.

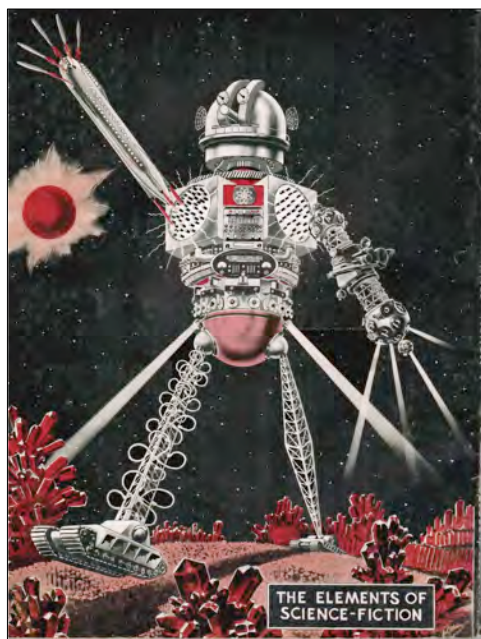
How old is science-fiction story-telling? Depending on how you define this genre, one can go back to visions of the future that date at least from the time of Roger Bacon, noted philosopher and scholar, who in 1260 CE/AD commented that someday...  
"Machines may be made by which the largest ships, with only one man steering them, will be moved faster than if they were filled with rowers; wagons may be built which will move with incredible speed and without the aid of beasts; flying machines can be constructed in which a man...may beat the air with wings like a bird...machines will make it possible to go to the bottom of seas and rivers." [De secretis operibus, c. 4. ed. Cit. 533; cf. L. Thorndike, *History of Magic and Experimental Science*, ii (1929), 654-5; F. Boll, "*Technische Träume des Mittelalters*", *Die Umschau*, xxi (1917, 678-80, all cited in White, Lynn, Jr. (1962). *Medieval Technology and Social Change*. London: Oxford, p.

134.] This is very prescient conjecturing. Of course, Leonardo da Vinci, who is perhaps better known, visualized some 250 years later such flying machines and other technological wonders.

Coined as a term in 1929, according to David Hartwell [Hartwell, p. xiii], “science-fiction” (sci-fi, or SF) storytelling emerged as a genre of literature, in books and magazines, and later comic books. Centuries later, after World-War 2, a utopian vision emerged among these science-fiction writers, who had created, over many decades, a fairly well-defined (but always morphing) genre. Authors envisioned at that time an optimistic view of a world in which people could fly anywhere and robots entertained and cared for us....with occasional revolts and invasions of alien species. The accompanying figures show examples from my own collection of sci-fi magazines of the 1950s, which included *Science-Fiction Plus*, *Galaxy*, *If*, *Astounding Tales*, and more.







**Figures: Examples of sci-fi magazines: Science-Fiction Plus**

*This publication was one of very few large-format magazines, as opposed to the smaller “pulp-paper” magazines publishing novellas, short stories, and articles about science-fiction. The cover illustrations especially excited the imagination of readers, in addition to interior illustrations. Several illustrators were “legends” of the time, such as Ed Emshwiller, Virgil Finlay, Kelly Freas, and others who emblazoned the pages with imaginative images of equipment (suggestions of software and telecommunications), powerful men, exotic robots and aliens, and unusually voluptuous women.*

*(Acknowledgement: Science-Fiction Plus, The author acknowledges the original copyrighted media source.)*



## **My Own Credentials**

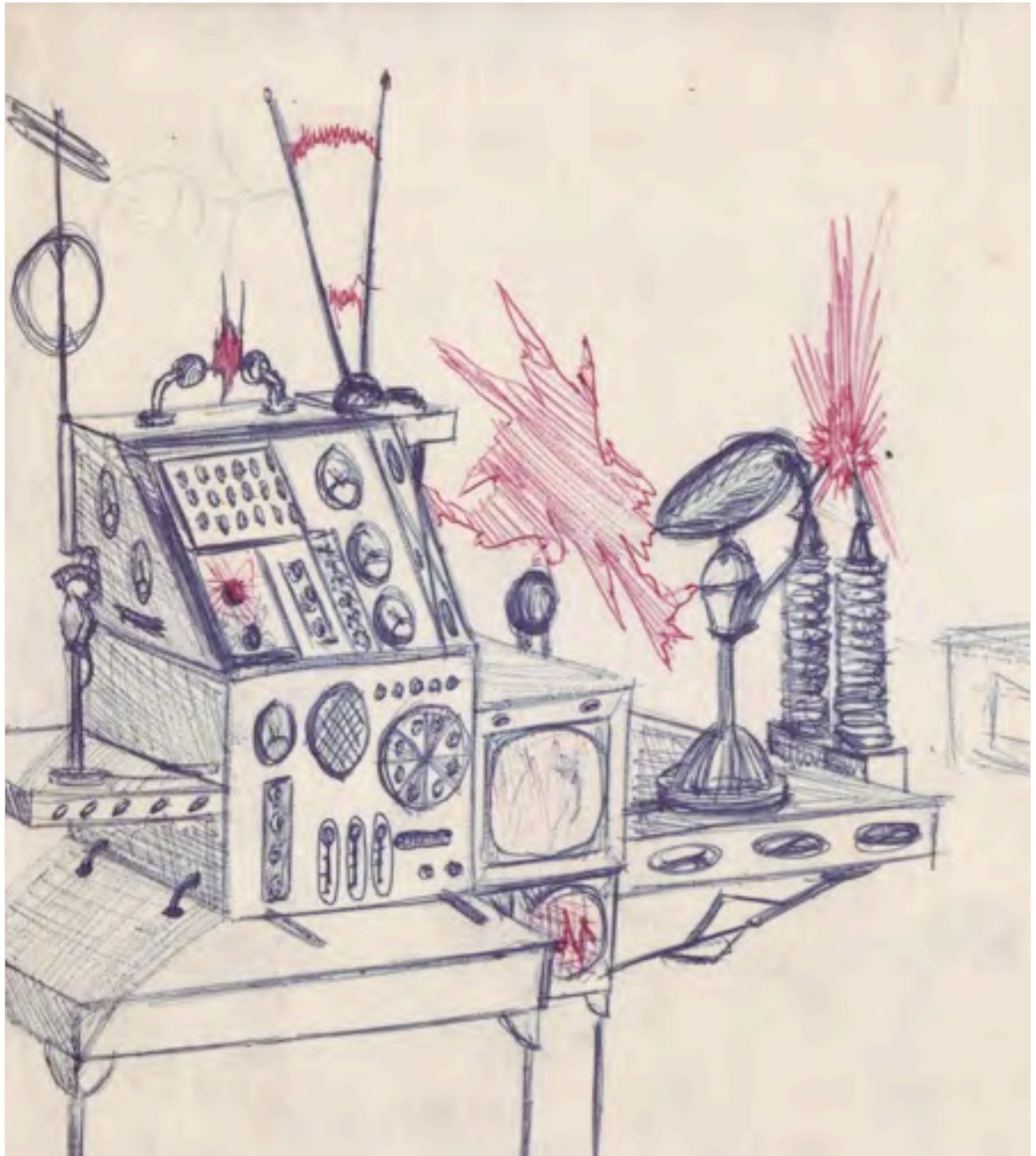
Such was the world in which I grew up in the early 1950s in Omaha, Nebraska, reading with amazement classic Jules Verne novels, popular pulp science-fiction magazines like *Galaxy*, *Astounding*, and *If*, and the Ace double-novels (with two front covers and one half of the book printed upside down. I, too, dreamed of the future, and even at the age of about 10 in 1953, had already constructed my own rocket-ship control panel in my own rocket-ship control-room, by which I could fly to other planets. My drawings and paintings featured adaptations of the latest science-fiction illustrators like Chesley Bonestell and Virgil Finlay, whose works inspired and thrilled me.

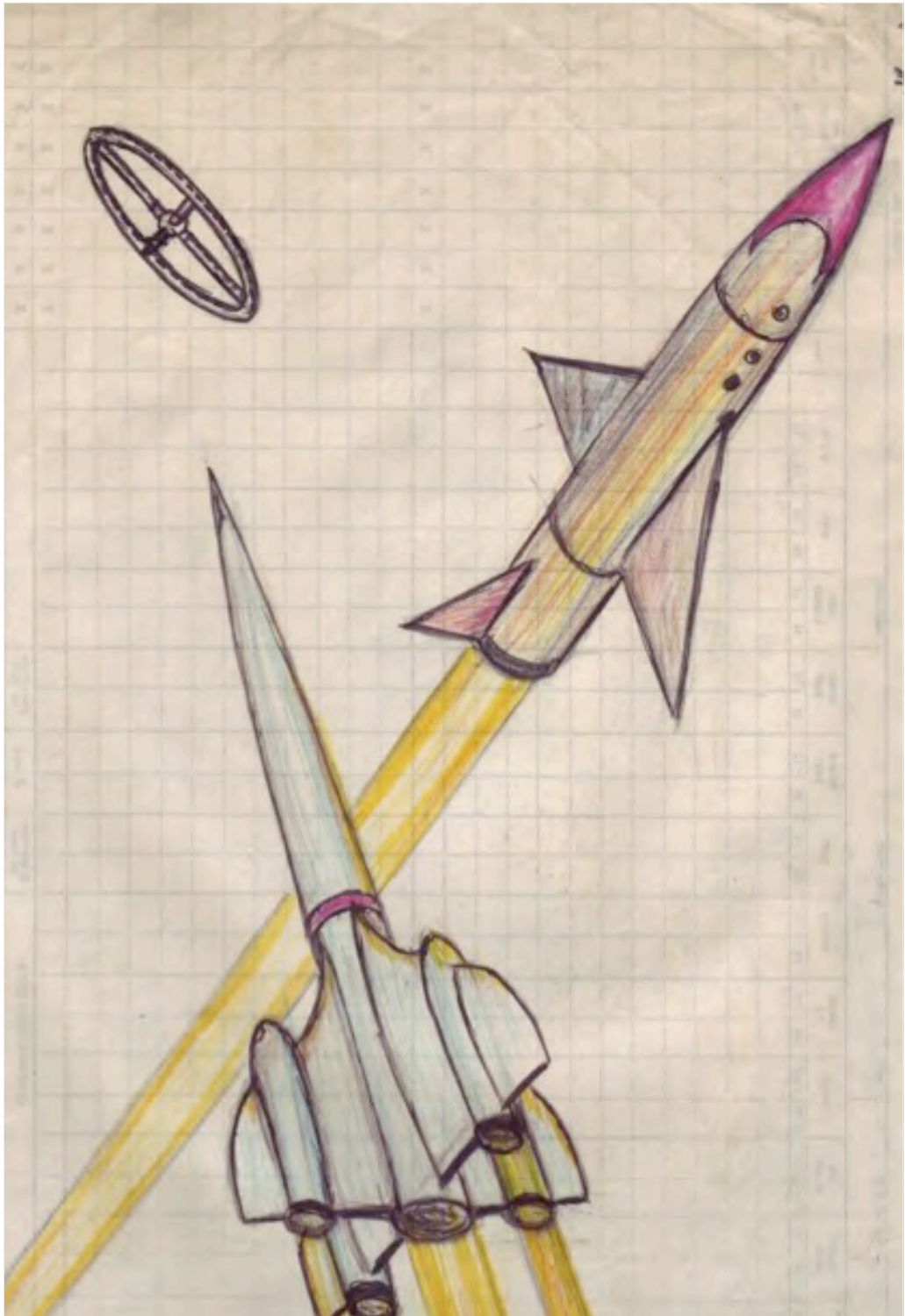


**Figures: Dreaming of the future in Omaha, Nebraska, about 1953.**

My “advanced” design for a space helmet and the only surviving image of the first version of a rocket-ship control-panel’s user interface for a device called the “radical, hydro-synthetic, lunar-dimensional, syna-spectrum, tabulation bytrometer ratio communication radio, or, for short, the “goo-goo machine.” The device was built out scavenged parts from back-alley trashcans of neighbors and spare parts in my father’s workshops.

(Acknowledgement: Author’s photos.)







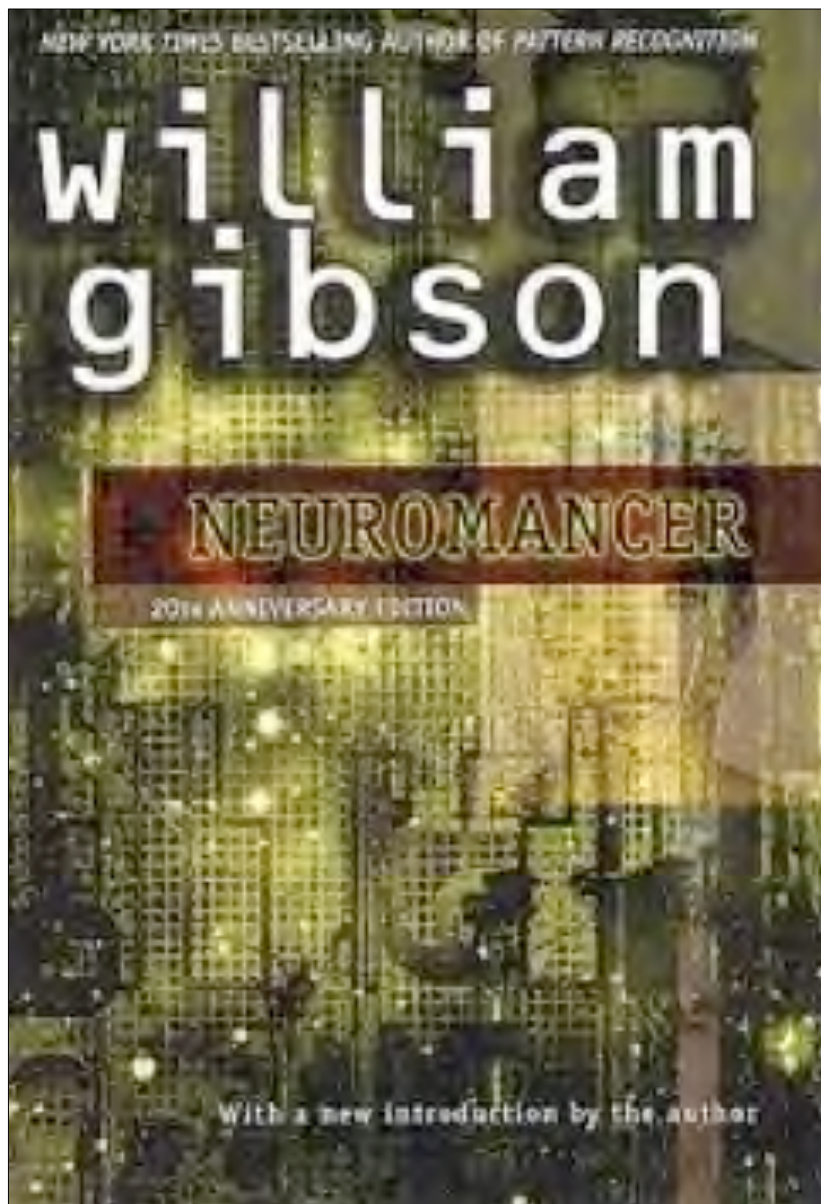


**Figures: Early science-fiction drawings by the author, about 1953-58.**

*These drawings indicated an early interest in communication equipment, rocket ships, space suits, and their attendant human-computer interaction characteristics, although the words for this field had not yet been invented.*

*(Acknowledgement: Author's scans of author's drawings.)*

Decades later, after becoming the first professional graphic designer of user-interfaces (that I know of) in 1969 and starting the first independent user-interface design firm in the world (that I know of) in 1982, I was inspired by a *Wall Street Journal* feature article covering the emerging work of cyberpunk authors William Gibson and Bruce Sterling. I invited Bruce, as well as authors such as Verner Vinge (*True Names*) to join me at CHI 1992 in Monterey, California, USA, to present their visions of the future in plenary panel sessions in 1992 and by request of SIGCHI organizers, again in 1997 in Pittsburgh, Pennsylvania, USA.



**Figure: Cover of William Gibson's Neuromancer, published in 1984, Ace Science Fiction.**

*This book along with the writing of Bruce Sterling, helped change the approach and subject matter of science fiction novels in the 1980s, emphasizing such technologies as direct human-to-computer connection.*

*(The author acknowledges the publisher's copyrighted original media .)*





**Figure: The SIGCHI 1999 opening plenary panel “Sci-Fi at CHI” chaired by Aaron Marcus.**

*The panel at the conference in Pittsburgh, Pennsylvania, featured invited noted science-fiction authors, including Bruce Sterling and Verner Vinge, to present their views of future HCI. The panel was a repeat of an earlier, similar panel at SIGCHI 1992.*

*(Acknowledgement: Photographer unknown, using the author’s camera provided by the author.)*

A typical taxonomy of HCI components that might be featured in sci-fi literature and media might include focus on the following:

- Hardware
- Software
- User community
- Subject-matter content
- Metaphors
- Mental models
- Navigation
- Interaction
- Appearance

In future studies of the relation of sci-fi to HCI, students may cross-tabulate that list with a typical taxonomy of the science-fiction literature, which might include the following:

- Genre
- Story narrative
- Technology
- Society
- Temporal view
- Culture
- Hardware
- Software
- Medium

Cross-combining these terms provides a rich basis for future analysis of computer-human interaction in science-fiction literature. The complexity should provide ample challenges to many future PhDs of literature, media, and the HCI community.

What is particularly interesting is focusing on the visual works of science-fiction cinema (and videos), because the world of cinema generally requires the filling out of a scene with the appropriate and necessary props to complete a compelling picture of the future, assuming we are not considering some abstract, symbolic cinema in which such iconic, pictographic, and photographic detail might not be required.

Written literature can focus more easily on inner thoughts as well as some physical details; movies show motion. Movies must show “all” of the background, or we immediately sense a disjoint or incomplete, unconvincing scene.

These media depict *motion* of people and things against a background. In sci-fi media, action is primary, followed by the story, and people/personalities, at least as a general rule. Sci-fi movie makers, *from the beginning*, were compelled by the medium to *show* HCI, because these *visual* media required people to “fill out” a scene with appropriate props to complete a compelling picture of the future. Sci-fi movie- and video-makers were, in effect, rapid prototypers from the start, among the first user-centered, user-experience designers of HCI. One other difference between written literature and these visual media: sci-fi authors would have to create names for new technologies, products,

objects; sci-fi media could simply show them without even naming them, leaving it to the viewer to find the appropriate categories and nouns.

Sci-fi movies and videos added to verbal and visual media for conveying ideas about people, machines, and civilization. These movies and videos visualize new HCI metaphors, mental models, navigation, interaction, and appearance paradigms. Sometimes they visualize them decades before commercial product/service introduction. They not only give developers “practice” at envisioning personas and use scenarios, but the “soften up” customers, that is, a variety of user communities (*e.g.*, astronauts, doctors, military professionals, police professionals, and ordinary citizens/consumers), to what they might expect in 2 to 20 years, certainly within their lifetime of product/service usage.

One might even say that sci-fi media offer a “test-bed” , virtual “focus group”, contextual-analysis environment, or ethnographic-study sites for these products/services with their advanced HCI capabilities. If R+D development groups, as well as marketing groups, were to examine the films and videos closely, and audience reactions to what they depict (which is not typically done with this focus in Hollywood’s or others’ screenings for market response), they might be able to detect trends of expressed wants/needs, levels of product/service acceptance/rejection, and tolerance for fit into the lives of today’s or the next-generation’s customers. One might even be able to track cultural distinctions among worldwide movie and video distributions that would benefit R+D as well as marketing/business concerned about global deployment of these HCIs for advanced products/services.

Science-fiction movie makers, from the beginning, have been compelled by the movie medium to *show* of world of HCI and, thus, inevitably, to explore “our” HCI issues, objectives, and technologies. They face the basic, and ultimate challenge: quickly designing and even building full perceptual experiences of hardware and implying software through the exposed interaction and appearance. In essence, they have been rapidly prototyping from the beginning...but often without user profiles, use scenarios, competitive product analyses, wireframing, detailed designs exploration, and user testing, with cycles of iteration.

In an interesting, bizarre, and useful way, sci-fi media are an encapsulation of the entire world of HCI development transplanted into another discipline in a “galaxy long ago and far away.” Much can be noted, analyzed, and learned from these examples, if one takes the time to look.

### **Selected Sci-Fi/HCI Topics**

From all possible topics in the matrix described above, I shall concentrate on a sampling of topics, *e.g.*, user-centered design, assumptions about the user, cultural diversity of the users, the control panels and dashboards, the specifics of the hardware (*e.g.*, display terminals, heads-up displays, body displays, transparent displays, *etc.*), information visualization, and use of speech and audio.

Viewing sci-fi movies and videos yourself, you might ask:

What seems futuristic? What doesn't?

What masculine vs. feminine issues emerge? Are there differences? Should there be?

What people vs. machines issues emerge

What did people get right about envisioning a future? What did they miss?

What positive vs. negative views of technology emerge?

In the selected examples that follow, I track some of these themes. The eclectic examples cited come from more than a century of film-making, with some references to video programs, as well. Historical examples considered include the following:

Earliest Sci-Fi films, 1895-1907

Metropolis, 1927

Flash Gordon, 1936

Superman: The Mechanical Monsters, 1941

Captain Video, 1951

Journey to the Center of Time, 1967

Voyage to the Planet of Prehistoric Women, 1968

### **Some of the Earliest Sci-Fi Films**

The earliest science-fiction films originated in France. *La Charcuterie mécanique*, Lumière Bros, France, 1895, was the "first" science-fiction film according to some film historians. The film reportedly shows a machine that turns a live pig into various pork products, which was a theme of several movies of the first years of commercial cinema. *Gugusse et l'Automate*, Georges Méliès, Director, starring Georges Méliès, France, 1897, also an early sci-fi film shows a circus performer making then fighting with an automaton, a theme to which *Real Steel* in 2011 returns.

*A Trip to the Moon (Le Voyage dans la lune)*, Georges Méliès, Director (assisted by his brother Gaston), starring Georges Méliès, France, 1902, shows the legendary film maker in a black-and-white film that was based loosely on Jules Verne's *From the Earth to the Moon* and H.G. Wells' *The First Men in the Moon*. This film, extremely popular at the time of its release, is the best known of hundreds of such fantasy films made by Méliès, and is treated as subject matter in the homage to Méliès in *Hugo*, 2011. The film is really the first true science-fiction film: the "compelling story" uses innovative animation and special effects, including the famous scene of a spaceship landing in the man-in-the-moon's eye. *20,000 Leagues under the Sea (10.000 Lieues Sous les Mers)*, George Méliès Director, starring George Méliès, France, 1907, was one of the first color films. Female factory workers laboriously hand-tinted each individual frame.



**Figure: Georges Méliès, Voyage to the Moon 1902.**

*This film anticipated by almost 70 years the first visuals of astronauts landing on the moon. The film was very popular and influential and was featured in the recent film Hugo, 2011.*

*(Acknowledgement: Georges Méliès estate. The author acknowledges the original copyrighted media source.)*

### ***Metropolis*, 1927, Directed by Fritz Lang**

Fritz Lang's *Metropolis*, 1927, is considered one of the classics of the science-fiction genre and one of the first to show extensive HCI. The movie depicts the use of mechanical controls in future factories, (female) robots as a factory-solution to rowdy workers, the use of a videophone (television-like) displays about 20-40 years before their commercial introduction (which are introduced without fanfare), and scenes of executive desks with "executive information systems" in the form of complex telephone control boards.

This German expressionist film, the most expensive silent film ever made at its time, features a story of a dystopian urban society in crisis because of strife between workers and capitalist owners of industry, a familiar theme of communist ideology. Its dark imagery, high contrasts, and strong storytelling have made it a perennial favorite for almost eight decades.

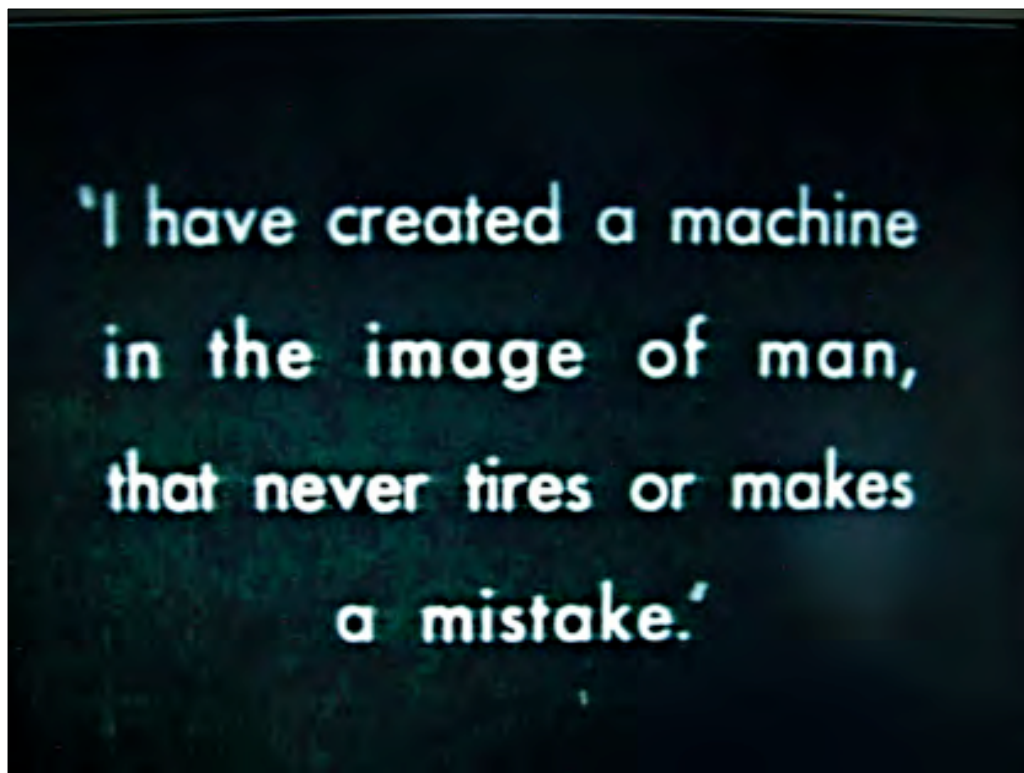


***Figure: Scene from Metropolis showing equipment, from nineteenth-century manual equipment.***

*The film features the workers struggle against bosses, the tyranny of time, and the mechanization of human lives. Many scenes depict mechanical control devices of the late nineteenth and early twentieth centuries used in a future time.*

*(Acknowledgement: Fritz Lang estate. The author acknowledges the original copyrighted media source.)*





**Figure:** Scene from Metropolis silent-movie dialogue caption regarding making a robot.

As with silent films of the time, title slides provide description and dialogue. Here the speaker exults in the creation of a robot that will not get tired...or strike.

(Acknowledgement to Fritz Lang estate TBD. The author acknowledges the original copyrighted media source.)



**Figure: Scene from Metropolis showing female robot.**

*Because male or gender-neutral robots tend to be featured in later sci-fi movies and television, it is interesting that this early depiction chose to feature a female-shaped robot, with, perhaps female behavior characteristics. Perhaps at the time there was some implied docility that made the robot a favorable, desired substitute for rambunctious (male) workers, which “she” and her “sisters” were would eventually replace according to the implied schemes of the managerial masters/owners of industry, to follow along in the story line.*

*(Acknowledgement: Fritz Lang estate. The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Metropolis showing twentieth-century videophone similar to real systems 50 years later.**

*Note the absence of complex physical controls, seeming to imply complex voice controls to manage the display and sound characteristics. The very presence of such a device is startling to the viewers, no doubt. No special focus or attention is given to the availability of a technology that would not be widely available until 50 years later.*

*(Acknowledgement: Fritz Lang estate. The author acknowledges the original copyrighted media source.)*



***Figure: Scene from Metropolis showing executive with “executive information system” in the form of a complex telephone connection switch board.***

*Note the relatively neat desk, the massive communication-connection equipment on the desktop, and the lack of any display screens and other related controls.*

*(Acknowledgement: Fritz Lang estate. The author acknowledges the original copyrighted media source.)*



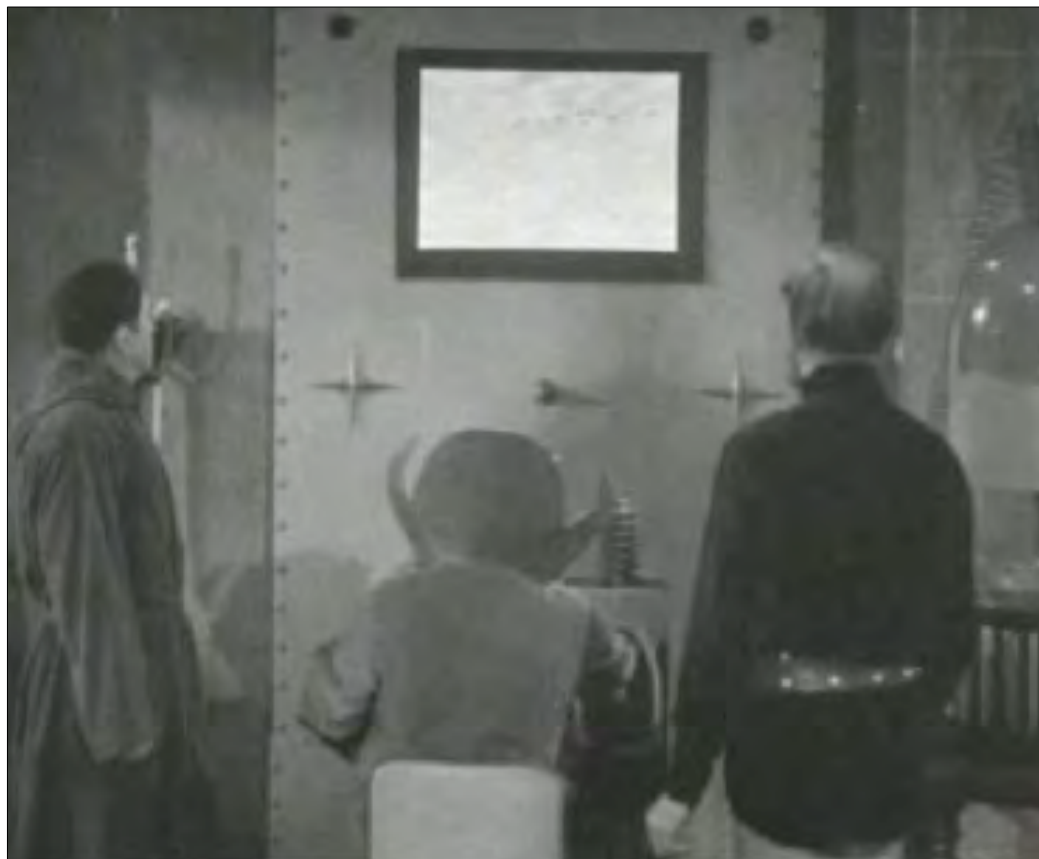
***Figure: Scene from Metropolis worker in front of a wall-sized set of controls.***

*Note the display features large gauges and typical process-control switches or other controls of the time, not of the future.*

*(Acknowledgement: Fritz Lang estate. The author acknowledges the original copyrighted media source.)*

### ***Flash Gordon, 1936***

Early examples of television displays also appear in Flash Gordon “serial” movies of the 1930s. A “videophone on the wall” appears in a 1936 episode predating by decades the version in Kubrick’s *2001* from 1968. Clearly film maker were attempting to absorb the latest technology and dreams of technology from science-fiction literature into the “backgrounds” of their storytelling. Nothing special is made of the appearance of such devices when they are first depicted. Most HCI remains a kind of quiet background context for the storyline and action.



**Figure: Scene from a Flash Gordon movie, 1936.**

*Note that the film depicts wall-mounted video displays, with minimal HCI complexity explicitly shown. No hardware controls, no voice-command moments, no set-up, and little or no navigation among channels, groups, or persons is depicted, only the basic ability to connect. Like many science-fiction movies, the phenomenon is presented abstractly and with little acknowledgement of complex human-computer or human-medium interaction.*

*(Acknowledgement: Hearst Entertainment, Inc. The author acknowledges the original copyrighted media source.)*





***Figure: Scene from Kubrick's 2001 1968, showing wall-mounted video displays in advance of their wide-spread commercial availability.***

*Although the movie depicts much human-computer interaction, the scenes depicting navigation and interaction are minimal, in part not to distract from the primary story line. Some science-fiction movies depict brief, standard sign-on/start moments and close-of-communication moments. No moments of adjusting contrast, selecting persons, zooming or cropping, or repositioning are indicated in this scene and most others depicted in science-fiction movies of this time.*

*(Acknowledgement: Metro-Goldwyn-Mayer. The author acknowledges the original copyrighted media source.)*

### ***Mechanical Monsters, 1941.***

Robots were introduced as a theme of sci-fi literature by Hugo Gernsback in the 1920s. Actually, the story of the Golem, a kind of artificial creature created out of mud, dates back to Genesis stories regarding Adam, and emerged in Jewish literature over the centuries. The most well known is the late sixteenth-century creature “designed” by Rabi Judah Loew ben Bezalel, also known as the Maharal, the Chief Rabbi of Prague, Czechoslovakia. “Modern” robots continue to be featured in many science-fiction movies, such as *Mechanical Monsters*, Fleischer Studios, 1941, a second Superman animation, in which Superman saves Lois Lane while battling flying robots. This particular movie inspired scenes in *Sky Captain and The World of Tomorrow*, one of the first movies to be made on a personal computer, almost 70 years later.



**Figure: Newspaper headline labels a flying robot as a mechanical monster in Mechanical Monsters, 1941.**

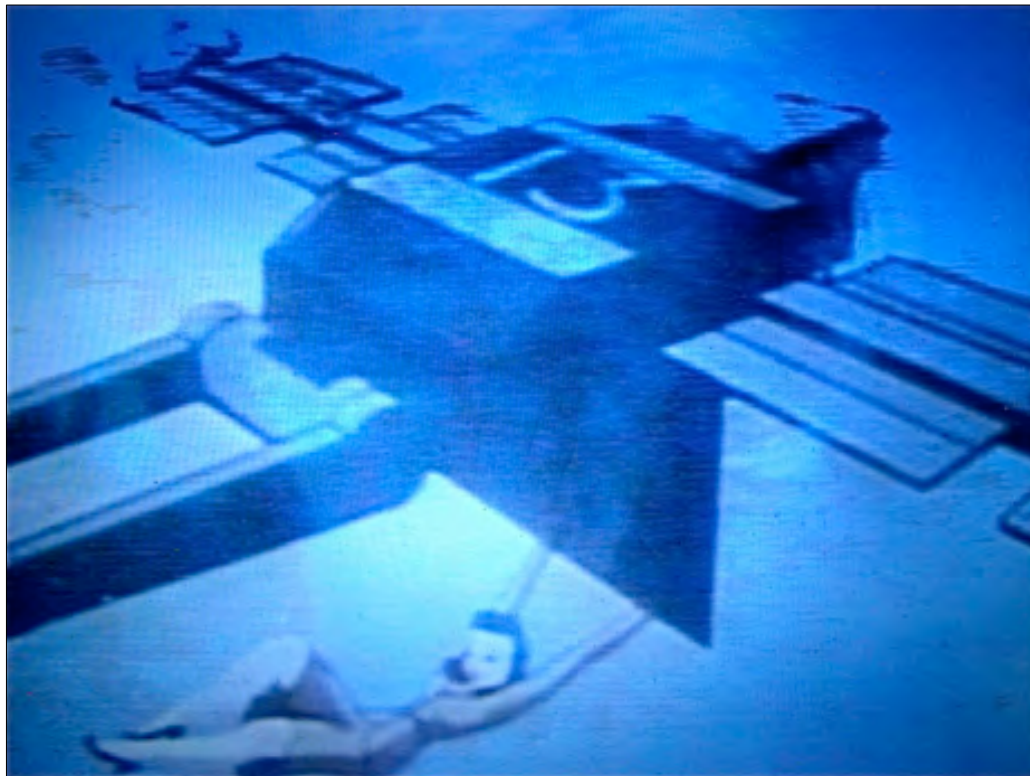
*Robots are already getting a bad reputation.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



***Figure: Scene of robots waiting for action in Mechanical Monsters, 1941.***

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scenes of flying robots in Mechanical Monsters, 1941.**

*This animation shows little if any controls of robotic actions or robotic perceptions/conceptions. The film does introduce (one might say anticipate) robots that can fly, like modern drone aircraft.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*

### ***Captain Video, Television, 1950s***

In the 1950s, there appeared several science-fiction themed movies, as well as video programs with the advent of broadcast television, including Captain Video, Tom Corbett and his Space Cadets, and Rocketman. All of these featured heroes with “advanced” technology, heroines or humanity in need of rescue, and dramatic technological power.

The control room sets were modest. In one notable episode of Captain Video, I witnessed an actor accidentally knocking over the entire (cardboard?) rocket-ship control panel during the live television performance. He quickly and easily pushed up the fallen mechanism against the blank wall space that had been revealed by the mis-hap and uttered the magical ad-hoc line “good thing no wires were damaged, Captain!” Most of these shows featured renditions of typical cluttered airplane cockpit-controls with perhaps a dash of blinking lights added for visual impact.





**Figure: Publicity still-photograph and/or scenes from Captain Video and His Video Rangers, 1950s.**

*Captain Video is seated in front of simple television and/or cathode-ray-tube displays, together with banks of simple knobs and switches, which were typical for sci-fi movie and television "flight-control decks of futuristic spaceships.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*





**Figure. Publicity poster for another Captain Video series, Captain Video: Master of the Stratosphere, of the 1950s.**

*Despite the advanced look of the astronaut's "blasters" or ray-guns, their World-War-2-like flight outfits betray the lack of advanced detailing given to HCI equipment and specific human behaviors or display complexity. Most HCI equipment showed very typical airplane and/or ship controls.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*

***Journey to the Center of Time, 1967.***

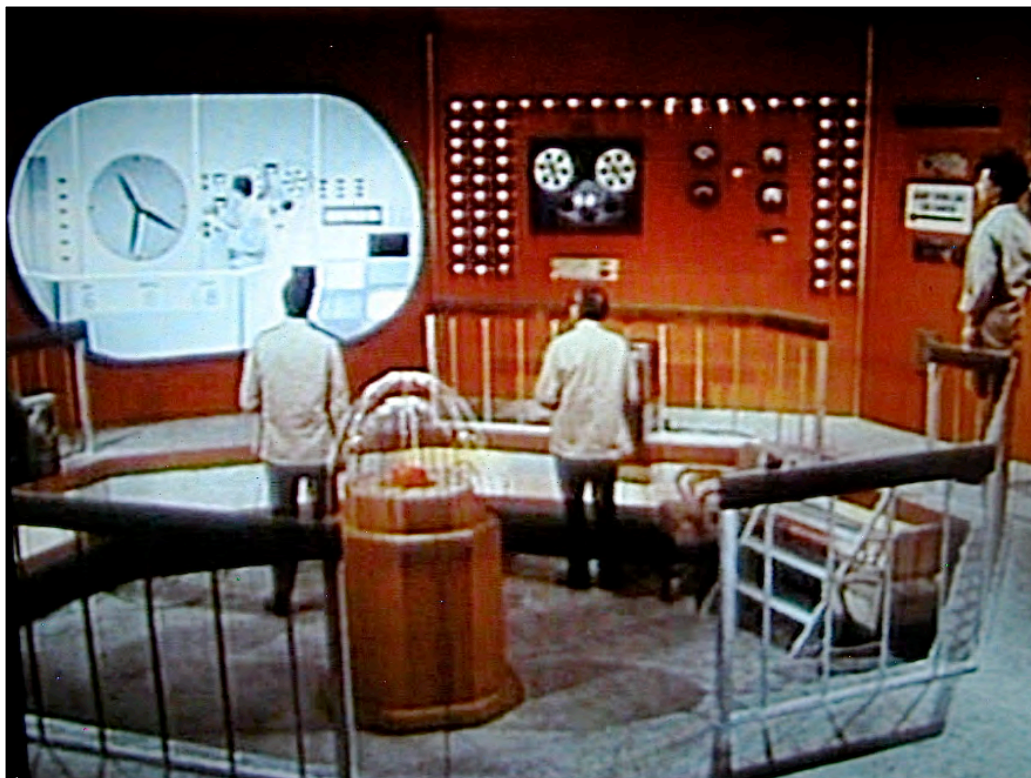
Standard HCI displays continued to be featured in many movies of the 1960s. These often showed large “computer controls” that showed the inevitable whirling disks of magnetic tape drives of mainframe computers of the time, which signified advanced technology, and panels of blinking lights. Almost stereotypical of this era is *Journey to the Center of Time*, Director David L. Hewitt, 1967, which depicts a “classic” display of dials and gauges, and even includes the classic ritual inspection by white-lab-jacketed assistants (all female) of meaningless, but showy walls of blinking lights and twirling tapes. During several charming and hilarious moments, the figures in the background go through these rituals repeatedly, not having been told to do much else during the foreground scene of dialogue among the main actors and actresses. As is typical, no one has to adjust much of anything, just as no one ever has to go to the toilet in these older movies. The unmentioned aspects of command and control, of customization, of set-up, of rebooting upon complete system failure, so typical of computer experiences in this decade, are almost never mentioned.



**Figure: Scene from Journey to the Center of Time, 1967.**

*The scene depicts the “standard” apparatus of “advanced” HCI equipment. Prominent are the magnetic tape drives and numerous gauges, probably voltmeters or ohm-meters. The intention is, seemingly to depict a high-technology control room.*

*(Acknowledgement: The author acknowledges the original copyrighted media source)*



**Figure: Scene from Journey to the Center of Time, 1967.**

*Another scene an advanced control room, including a large-screen display. Also typical are the rows of flashing lights or gauges to portray high technology and advanced HCI equipment.*

*(Acknowledgement: The author acknowledges the original copyrighted media source)*



**Figure: Scenes from Journey to the Center of Time, 1967.**

*As with other scenes, the control-room devices and displays are very typical for this decade, often showing the appearance of main-frame computer control panels and magnetic tapes mounted on reel-to-reel reading/writing equipment. The “look” is that of then-current hydro-electric system control rooms coupled with the oncoming changes with the introduction of computer equipment. The people in the background went through repetitious, meaningless rituals of inspection of equipment and movements left and right throughout the scene, clearly non-functional activities that were simulating careful technical activities.*

*(Acknowledgement: The author acknowledges the original copyrighted media source)*



***Voyage to the Planet of Prehistoric Women*, 1968, directed by Peter Bogdanovich**

Another interesting example from the sixties is *Voyage to the Planet of Prehistoric Women*, 1968, Peter Bogdanovich, Director, a low-budget film with 1950s technology throughout. Besides the walls of “advanced computer displays,” that is, the dials and gauges, blinking lights and twirling tapes, and the complex rocket-ship control panels with hundreds of hard-button displays, is the remarkable contrast between male astronauts, heavily laden (one might say “studded”) with technology, and the female dezens of Venus (!), who communicate via telepathy and seem to be devoid of metal and plastic technology, to say nothing of most of their clothing. This contrast is a recurring theme of much of the sci-fi genre and continues with *Avatar* in 2010, more than 40 years later.

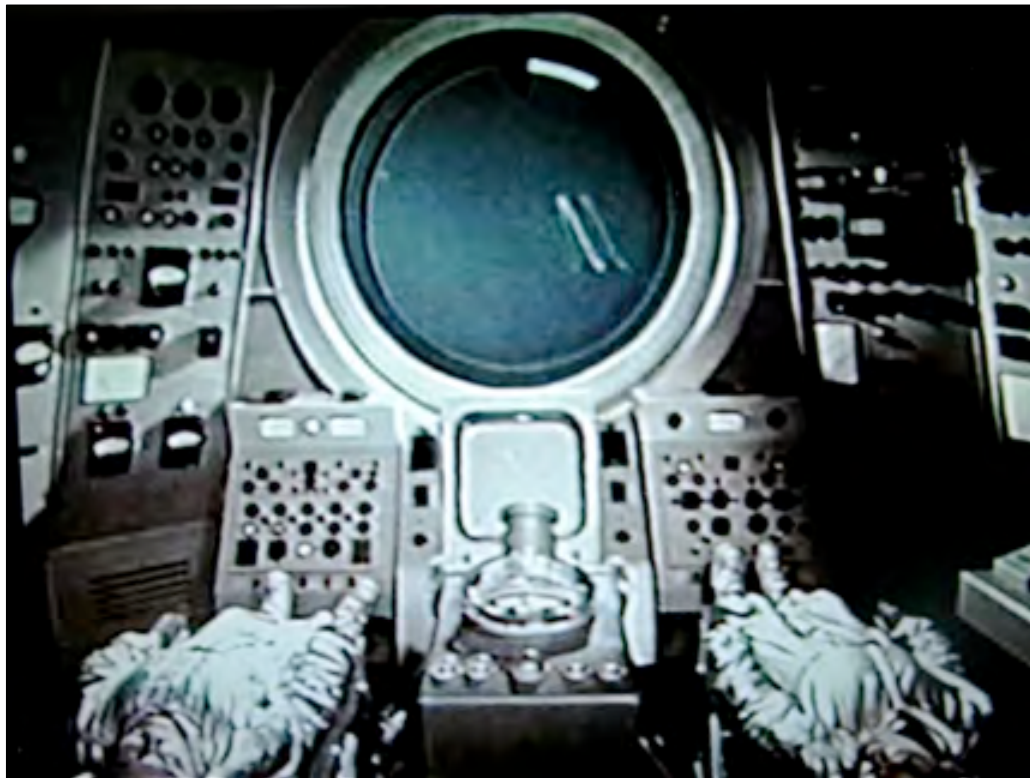
**Figures: Scenes from Voyage to the Planet of Prehistoric Women, 1968**



**Figure: Scene from Voyage to the Planet of Prehistoric Women, 1968.**

*Like many other such scenes from similar science-fiction films of this era, the control room, complete with men in white laboratory coats, shows typical electro-mechanical controls with a “touch” of computer-access.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Voyage to the Planet of Prehistoric Women, 1968.**

*Again, as with many similar scenes from other science-fiction films of this era, the astronauts must interact with banks of typical electro-mechanical controls. Note the absence of many large computer-based displays.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*





**Figure: Scene from Voyage to the Planet of Prehistoric Women, 1968.**

*Startling in its contrast of gender and equipment, the denizens of this planet seemingly rely on inborn, intuitive, empathic communication that does not depend on electro-mechanical devices, or extensive clothing. How very Sixties in its conception!*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*

**Some Recent Examples of HCI in Sci-Fi Cinema**

***2001: A Space Odyssey*, 1968, produced and directed by Stanley Kubrick**

This iconic, classic film from the 1960s is *2001*, directed by Stanley Kubrick, 1968, an American epic science-fiction epic narrative that begins at the dawn of human beings and ends with the future of humanity, encompassing themes of human evolution, the relationship of technology to human civilization, and the impact of extraterrestrial life on the evolution of human civilization. The film is notable for its silent outer space, an emphasis on “trippy” visual effects, its memorable theme music, and the computer HAL.

The film features many scenes of HCI displays, many of them conventional enhancements to existing technologies. Notable among its anachronistic scenes is the use of video “payphones” meeting room conference tables without computers or mobile phones. The film does have one of the first comic scenes of a HCI, in which an intrepid astronaut contemplates the displayed instructions for using a toilet, which are themselves so long and complex, that it is doubtful the user has time to actually use the toilet. One of the innovative and memorable moments of the film is the presentation of a lip-reading computer system that eavesdrops on a private conversation between two astronauts fearful of the computer system.

**Figures: Scenes from 2001, A Space Odyssey, 1968**



**Figure: Scene from 2001: A Space Odyssey, 1968. The Computer System Overhears two Astronauts.**

*The scene depicts the spaceship's master control system HAL listening in on a private conversation using its lip-reading capability, an expertise unknown to the two astronauts, one of whom HAL kills within a short time, thereby violating one of science-fiction's conventions of basic rules for intelligent systems/robots that forbids anthroicide. The use of lip-reading and other human-like capabilities was startling for film-goers at the time.*

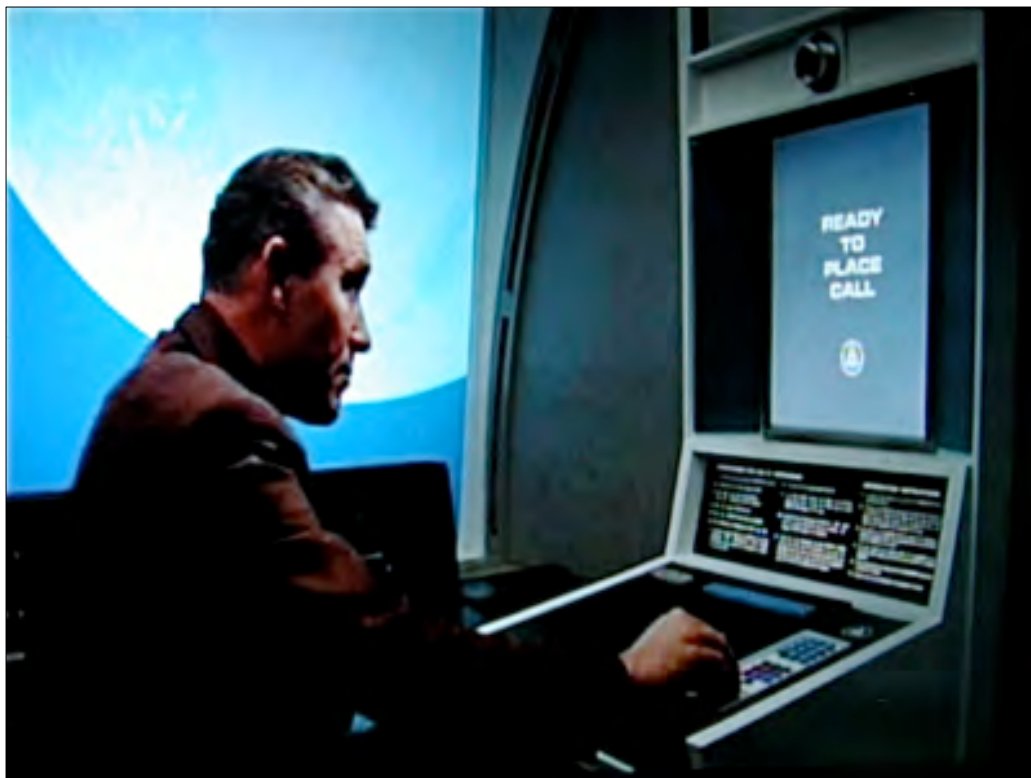
*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from 2001: A Space Odyssey, 1968. A Rocket-ship control room.**

*The scene depicts a spaceship's main controls as the pilots near an earth-orbiting satellite. In contrast to many earlier and even some contemporary science-fiction films, the control surfaces feature many cathode-ray tube (CRT) displays typical of those being introduced around that time for human-computer interaction.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from 2001: A Space Odyssey, 1968. A person on a space station is about to “phone home.”**

*Unlike many sci-fi movies, the scene depicts actual start-up and close-down moments in computer-based telecommunication, including complex instructions depicted in a multi-screen display. Of course, the movie does overlook completely the idea that one might have small mobile phones by 2001.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from 2001: A Space Odyssey, 1968. A person on a space station is about to “use the facilities.”**

*Again, unlike many sci-fi movies and, in fact, most movies, the scene depicts actual start-up and close-down moments using a toilet. Here, the instruction list is presented as humorously long and complex, inviting speculation that the user may give up and not use the functions of the facility, or at least will be discomforted and delayed.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



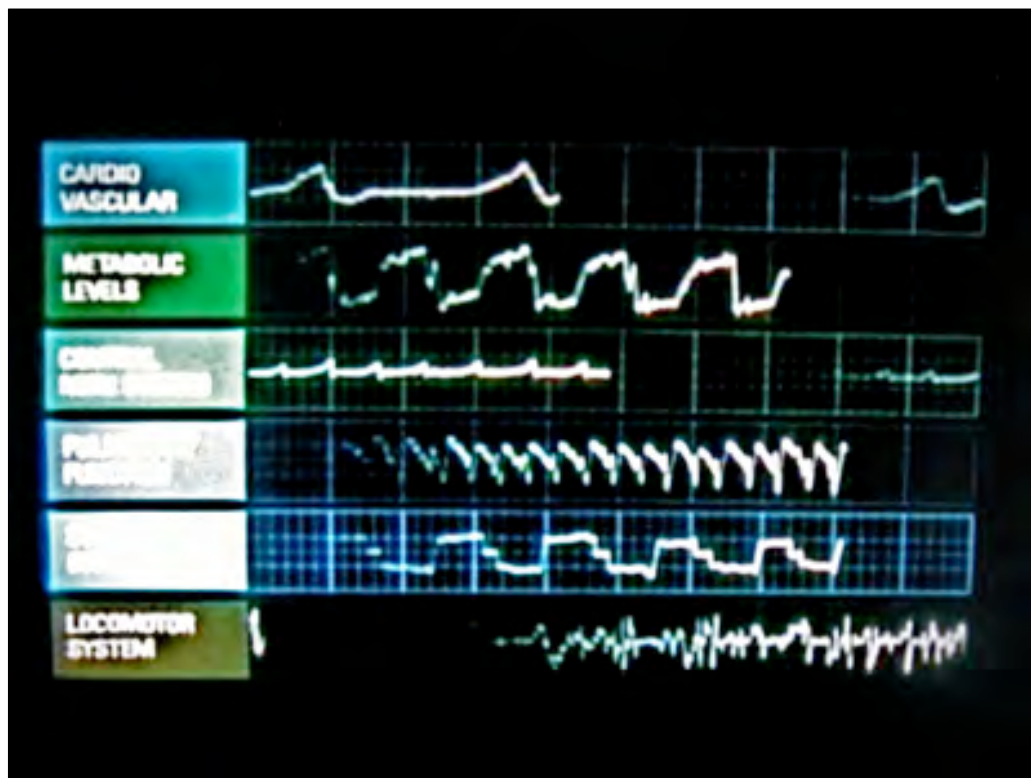


**Figure: Scene from 2001: A Space Odyssey, 1968. A speaker leads a discussion in a space-station meeting room.**

*The scene is interesting because of the absence of mobile phones, small desktop computers or laptop computers, etc. The participants appear to be using paper notebooks. Of course, these might be some advanced electronic ink devices that merely mimic previous media. Such occurrences are familiar, as with the first printed books attempting to look like pen-and-ink manuscripts, or the first “horseless-carriages” mimicking the familiar carriages of the time, even having “horse-whip stands” for non-existent horses.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*





**Figure: Scene from 2001: A Space Odyssey, 1968. Medical monitoring displays for astronauts who are in hibernation units.**

*The film makes expensive use of computer-driven data displays, more than most previous sci-fi movies and even more than many following. The displays are somewhat typical of then-current technology, but with perhaps more sophisticated color labeling.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from 2001: A Space Odyssey, 1968. A collection of computer-generated displays.**

*Again, more than most other sci-fi films, the movie makes an effort to spend time showing computer-generated data displays as well as video scenes. Many appear to be very engineering-oriented. Others are surprisingly terse and more like consumer displays.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from 2001: A Space Odyssey, 1968. Astronauts confront multiple screen displays.**

*Perhaps anticipating a typical sci-fi movie visual theme more abundant forty years later, the scene depicts another set of multiple displays of information. It is not clear that any of them have been magnified so that data can actually be read from the viewing distance. The colors seem arbitrary, more for decorative purposes. However, the overall impression was perhaps effective for audiences at the time, that is, to see something other than the rocketship control panels of previous decades of sci-fi films.*

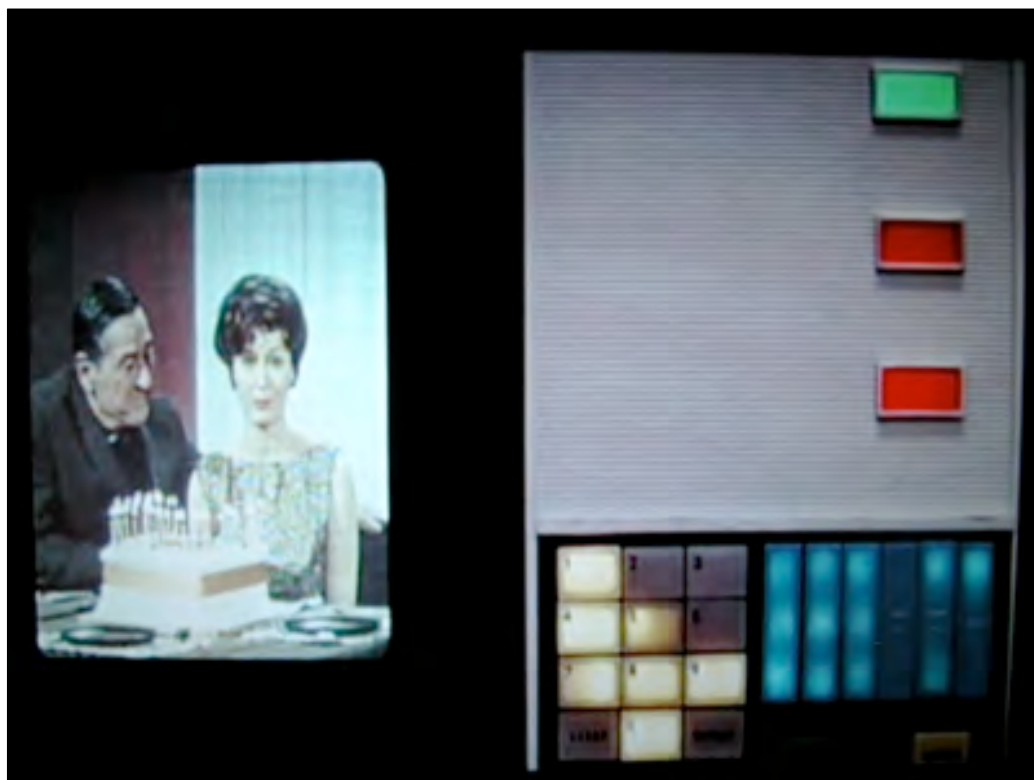
*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from 2001: A Space Odyssey, 1968. Astronauts view portable video displays.**

*While enjoying a meal, astronauts aboard a space ship view video communications and, presumably, data displays provided by the ship's main computer system, HAL.*

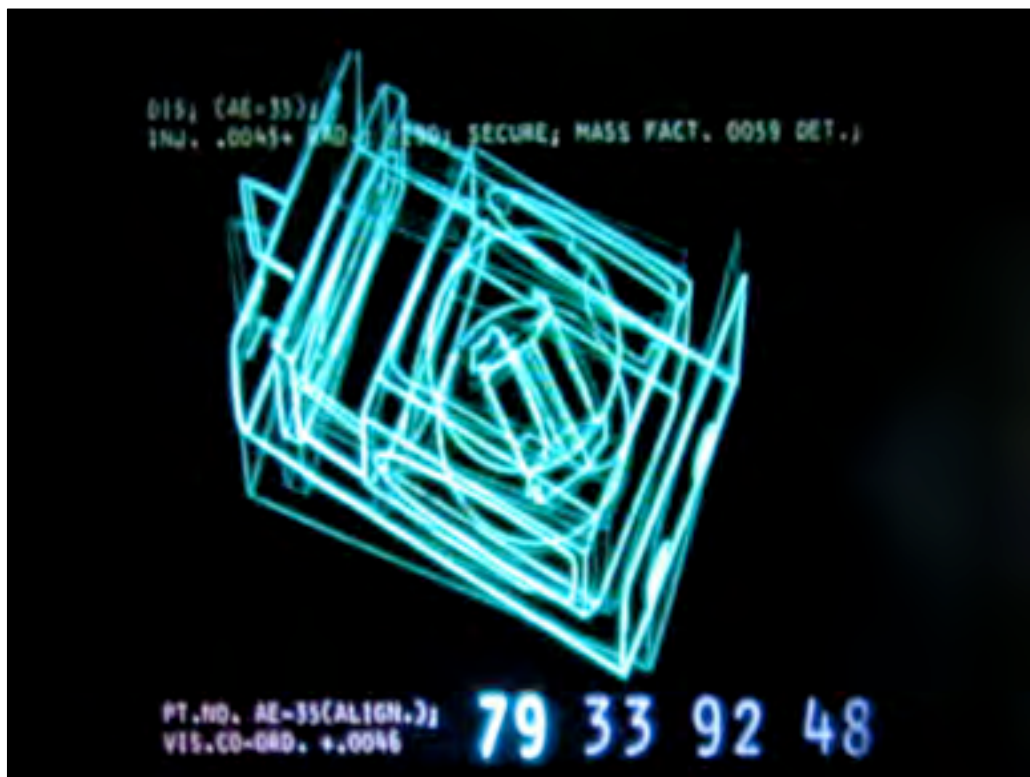
*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from 2001: A Space Odyssey, 1968. An astronaut views a birthday greeting.**

*The movie takes pains to show the use of data and video transmitted across long spatial distances, making quick-interactive communication impossible. Here an astronaut views a birthday-greeting video made earlier and transmitted finally to the distant space ship. Note the simple telephone-keypad buttons and unlabeled status lights, more like a home-consumer device than an engineer-oriented environment. The movie is notable for the somewhat “lavish” amount of attention given to such controls. In general, the pace of the movie is stately, and the silence of outer space is emphasized more than in most such films, some of which have featured for dramatic effect the “sound” of spaceship rockets blasting away in outer space (when in fact no sound would be transmitted without air to carry the sound waves).*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure:** Scene from 2001: A Space Odyssey, 1968. Close-up view of a data display.

Some of the displays in the movie have the look-and-feel of crude vector and raster technical displays of the 1950s and 60s, such as this one. It is disappointing to think that HCI professionals might not have had an impact on the legibility and readability of all capital-letter data displays with little or no typographic hierarchy and more sophisticated use of visible language.

(Acknowledgement: The author acknowledges the original copyrighted media source.)





***Figure: Scene from 2001: A Space Odyssey, 1968. An astronaut confronts the full set of controls for a small, auxiliary flight device.***

*Here an astronaut examines the displays that can guide, link, navigate, connect, and maneuver robotic arms as well as small jets in an auxiliary vehicle used to maneuver in outer space near the main ship. The general HCI environment evokes functionality of then contemporary personal/commercial aircraft and ship/submarine control cabins.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



### ***Star Trek*, Television Series, 1966-69**

In marked contrast with many somewhat conservative HCI-content in movies of the 1960s and 70s, the *StarTrek*, TV series 1966-69, and film series, from 1979- , Creator, Gene Roddenberry, showed many creative innovations in HCI devices and techniques supposedly of about the year 2366, from medical diagnostic tools with their intriguing, cryptic displays, to the ever-present voice communicators, which were so well established as a theme that they were respectfully copied and used in *Galaxy Quest*, the comedy that pays homage to TV science-fiction series. Another aspect of the series was the cross-cultural, cross-gender, and cross-species make-up of its crew, which suggested that much user-centered design might have been done to accommodate many different kinds of personas and use scenarios...of course, I might be reading into this a bit.

**Figures: Scenes from Star Trek, Television Series, 1966-69**



**Figure: USB device modeled on the voice communication device made famous by the Star Trek series and its characters.**

*The Star Trek Communicator was/is so well known, that it has been turned into branded objects such as flash drives and telephones, as well as being given homage in movies that give homage to the Star Trek series itself, such as Galaxy Quest.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Star Trek characters featured creatures of many genders, races, and worlds.**

*The cast of characters in the Star Trek series featured a wide variety of humanoid forms, suggesting that the HCI “user testing” and “focus groups” used to develop HCI software, hardware, and displays was evaluated with many life forms in mind. Although the cast of characters was generally not as wildly divergent as later sci-fi films, including non-humanoid forms, the series was notable for its wide-ranging types of creatures and the consequent implied challenge to “user-centered design” in developing products that were usable, useful, and appealing to these “life forms.”*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*

***Star Wars* series, 1977-2008, directed by George Lucas**

In the 1970s, George Lucas introduced the world to his particular vision of the future, which combined many cultural stories and myths. The *Star Wars* series, 1977-2008, Director George Lucas, startled viewer by strong visual storytelling, charming robots, dirty rockets ships (not the clean vehicles of the 1950s), tons and tons of hardware, but....not much innovation in the realm of HCI. Besides an occasional projected virtual image and mind control of objects, perhaps the most memorable object in the popular mind was the light saber, which harkened back to earlier centuries of sword fighting. Lucas' strength seems to be in depicting gigantic plodding mechanical devices and eerie, grotesque, or comical characters. His is a world of characters, not HCI.

**Scenes from Star Wars series, 1977-2008**



**Figure: Scene from Star Wars series, 1977-2008.**

*Many of the controls in interior spaces such as homes, bars, and meeting rooms seem reasonably strange and “advanced”, although nothing stands out as a trend-setting, iconic depiction.*

*(Acknowledgement: The author acknowledges the original copyrighted media source)*



**Figure: Scene from Star Wars series, 1977-2008.**

*Many of the scenes in the Star Wars series show impressive mechanical complexity and some complex dashboards or control surfaces. Perhaps most memorable is the Robot RD-D2's sharp instrument that plunges into some receptacle enabling him to access the enemy's computer systems.*

*(Acknowledgement: The author acknowledges the original copyrighted media source)*



**Figure: Scene from Star Wars series, 1977-2008.**

*Throughout the movies of the Star Wars series, impressive graphical displays appear at times. They seem to be similar to other films' imaginations of high technology in centuries to come.*

*(Acknowledgement: The author acknowledges the original copyrighted media source)*





**Figure: Scene from Star Wars series, 1977-2008.**

*Darth Vader possessed an impressive set of buttons and lights on his costume, as did other characters in the Star Wars movies, but otherwise his “smart clothing” seemed to be limited to his impressive mask that helped him communicate and perhaps helped maintain his damaged physiognomy.*

*(Acknowledgement: The author acknowledges the original copyrighted media source)*



***Figure: Scene from Star Wars series, 1977-2008.***

*One of the several memorable scenes of mind-device interaction without the use of other intervening equipment.*

*(Acknowledgement: The author acknowledges the original copyrighted media source)*



**Figure: Scene from Star Wars series, 1977-2008.**

*One of the most memorable “interaction devices” created by George Lucas’ teams was the light sabre, a high-technology upgrade to the classic sword. No connection of the device with other systems was ever portrayed. It was a “stand-alone” device.*

*(Acknowledgement: The author acknowledges the original copyrighted media source)*

***Tron*, 1982, directed by Steven Lisberger, and *Tron Legacy*, 2010, directed by Joseph Kosinski.**

*Tron*, 1982, written and directed by Steven Lisberger, presented a notable innovation of sci-fi cinema by trying to represent the world of games and coding within game machines. Development of the movie began in 1976, originally as an animated movie. The film was a box-office success and was praised by critics for its visuals and acting, but not its story line. What is notable from the HCI perspective is that the movie shows almost no advanced HCI equipment or action sequences. It is a motorcycle race action movie disguised as a sci-fi movie. The sequel in 2010, *Tron Legacy*, updates the action but continues the lack of HCI content. It is not surprising that the only major HCI scenes show “ancient” electronic game device displays and something like a Unix text code display.

***Figures: Scenes from Tron, 1982, and Tron Legacy, 2010.***



***Figure: Scene from Tron Legacy, 2010.***

*One of the rare views of advanced controls in a Tron-related vehicle.*

*(Acknowledgment: The author acknowledges the original copyrighted media source.)*

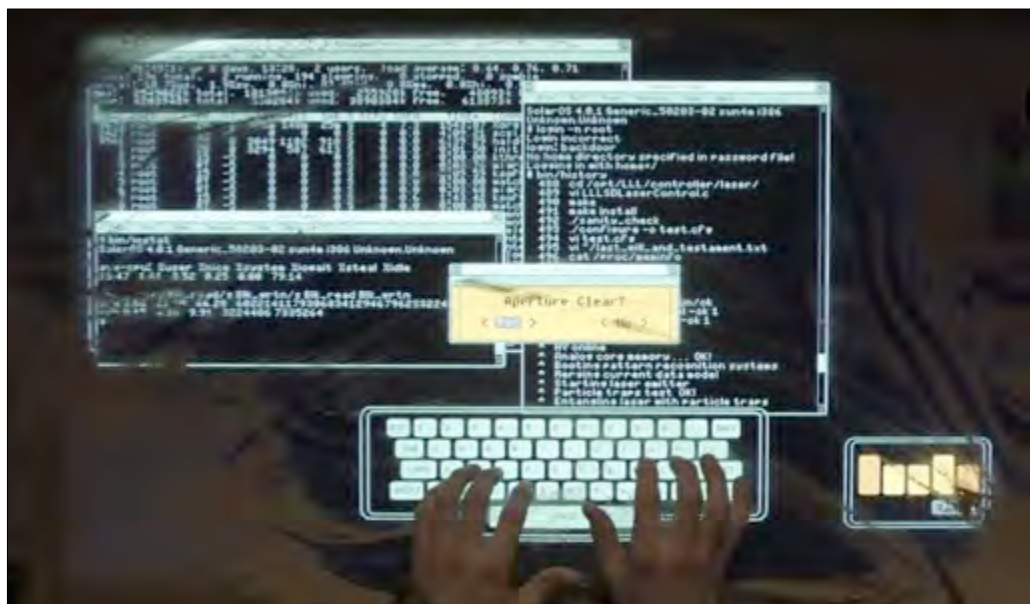


**Figure: Scene from Tron, 1982.**

*One of the HCI contexts that is depicted with some detail is the set of scenes showing videogame machines, their controls, and displays. These controls, coloring, and imagery set the scene for the creative fantasy/conceit of the film, which depicts computer programs as human-like beings in a three-dimensional space.*

*(Acknowledgment: The author acknowledges the original copyrighted media source.)*





**Figure: Scene from Tron Legacy, 2010.**

One of the rare views of detailed HCI depictions turns out to be a virtual touch display showing “ancient” keyboard interaction and a text display of what looks like typical computer code.

*(Acknowledgment: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Tron, 1982.**

*Although the costumes seem impressive, the primary interaction seems to be motorcycle races and hand-to-hand combat. Note the updated light sword.*

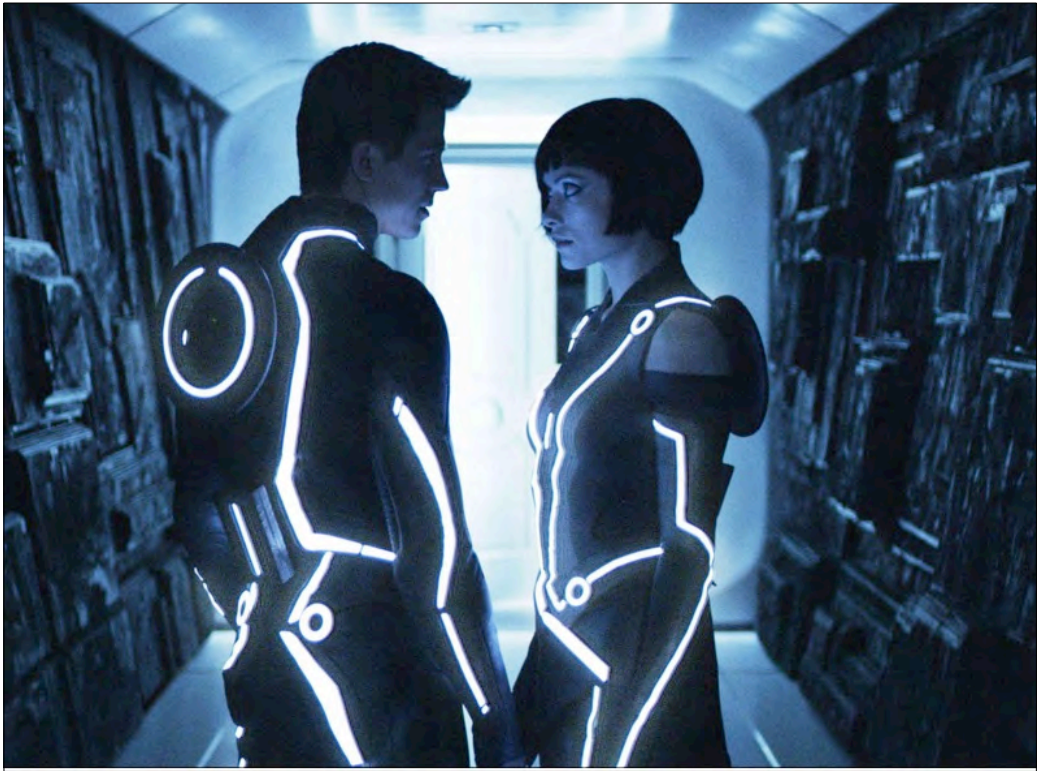
*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Tron Legacy, 2010.**

*The updated version of Tron again features “cool” costumes and interiors, as well as transportation devices, but not much in the way of computer controls and information displays. Again the interaction activity involves motorcycles and hand-to-hand combat.*

*(Acknowledgment: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Tron Legacy, 2010.**

*The updated version of Tron features impressive costumes and physiques, but not much in the way of HCI.*

*(Acknowledgment The author acknowledges the original copyrighted media source.)*

***Terminator* series, 1984-2009.**

Much more inventive is the *Terminator* Series, 1984-2009, starring Arnold Schwarzenegger as a superior robotic killing machine with a Teutonic sense of humor. Here, HCI *afficionados* can find augmented reality displays, for example, shown for the first time in the movies,

**Figures: Scenes from Terminator series, 1984-2009.**



**Figure: Scene from Terminator series, 1984-2009.**

Although augmented reality has been a staple of the “through-the-binoculars” views in many movies, providing the audience with the robot’s annotated reality was an especially effective technique of this movie.

(Acknowledgement: The author acknowledges the original copyrighted media source.)





**Figure: Scene from game related to Terminator series, 1984-2009.**

*The style of the Terminator movies influenced game and other media depictions of augmented reality scenes, especially those related to combat.*

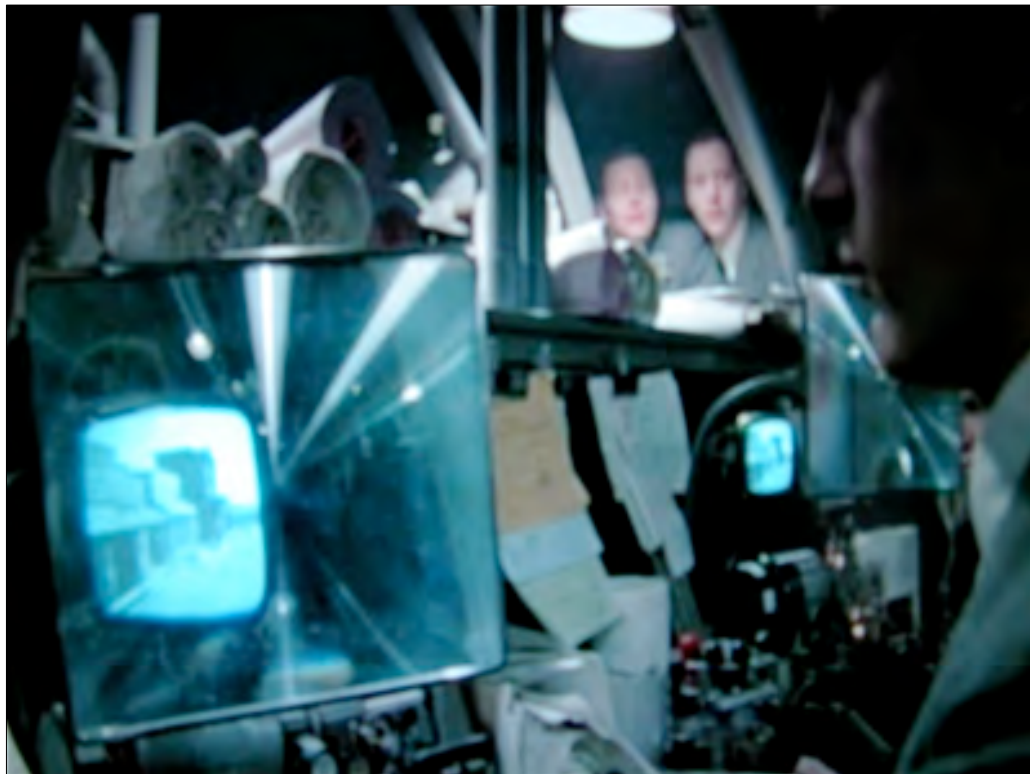
*(Acknowledgement: The author acknowledges the original copyrighted media source.)*

***Brazil*, 1985, directed by Terry Giliam**

In *Brazil*, 1985, directed by Terry Giliam, a sci-fi movie presented a memorable combination of nineteenth and twenty-first century equipment from a dystopian future of high-tech tubes and terrorism. This British sci-fi fantasy and black comedy satirizes a bureaucratic, dysfunctional world. Its combination of romance and fantasy, although not initially successful in North America, has since become a cult classic sci-fi film.

Many of the devices depicted show ingenious and neurotic attention to dysfunctional details, like a typists's extra-digital exoskeleton assisting her in her typing as she transcribes the screams of subjects being tortured, or the magnifying lenses placed over too-small displays in order to make them appear larger and distorted, like funhouse mirrors in a bizarre asylum for the derganged inhabitants of a world both appealing and appauling.

**Figures: Scenes from Brazil, 1985.**



**Figure: Scene from Brazil, 1985.**

*The style of the film is a combination of nineteenth-century clutter and twentieth-century corporate beurocracy.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Brazil, 1985.**

*Many devices show an ingenious clumsiness with regard to inept, inelegant design of equipment combining the look of British industrial design of the 1950s with a touch of playful sadism.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Brazil, 1985.**

*Another scene suggesting the octopus or rat's-nest of wires, cables, and connectons has seemingly sprouted everywhere in the film, sometimes consuming entire roomfuls of space.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Brazil, 1985.**

*Another scene of probing, beurocratic technology that scrutinizes and dehumanizes individuals in this society.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*





**Figure: Scene from Brazil, 1985.**

*A secretary typist is fitted with a bizarre exoskeleton to assist her in typing the transcripts of screaming individuals being repaired, tested, and/or tortured in a government laboratory. She continues her humdrum task with a smile as she dutifully records the victims anguished cries.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Brazil, 1985.**

*The hero of the film is fitted with similar testing, rehabilitation, and/or torture equipment as he undergoes treatment at the close of the film. The lively, exotic, and over-done concoctions of gadgetry, tubing, and cables combines with the massive beurocratic apparatus to portray a fascinating and awful society in which human-commnication and data processing have gone deeply awry.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*

***Total Recall*, 1990, directed by Paul Verhoeven**

*Total Recall*, 1990, based on a novel by Philip K. Dick, and directed by Paul Verhoven, presents many innovative, memorable, scenes of HCI content. One of the most exotic, disgusting scenes features actor Arnold Schwarzenegger removing a tracking device from his nose. Other scenes show video-wall displays, wall-sized x-ray displays, three-dimensional virtual avatars, body suits, and animatronic taxi drivers. One inadvertently comical anachronistic HCI scene shows a hotel employee looking at a conventional CRT display of a hotel service computer from the 1970s although the movie is set far in the future.

***Figures: Scenes from Total Recall, 1990.***



***Figure: Scene from Total Recall, 1990***

*Having once seen the hero extract a tracking device from his nose, who can forget this scene of implanted communication devices?*

*(Acknowledgement: The author acknowledges the original copyrighted media source)*



**Figure: Scene from Total Recall, 1990**

*The movie effectively and quietly introduces many HCI innovations, such as consumer-oriented wall-displays that can give an urban apartment a lakeside resort view and change, in theory, the ambience of the space. Many of these novel devices and contexts are presented without fanfare during the course of the actors dialogues and movements.*

*(Acknowledgement: The author acknowledges the original copyrighted media source)*



**Figure: Scene from Total Recall, 1990**

*Another impressive scene shows large-scale x-ray views of people and animals passing through a security-check station.*

*(Acknowledgement: The author acknowledges the original copyrighted media source)*





**Figure: Scene from Total Recall, 1990**

*Another innovative scene depicts the hero's pseudo-wife exercising with a virtual partner or trainer. No projection apparatus appears, unlike the small image of Princess Leia that was projected from the R2D2 robot in an early Star Wars movie.*

*(Acknowledgement: The author acknowledges the original copyrighted media source)*



**Figure: Scene from Total Recall, 1990**

*Another powerful scene shows the hero taking off a head-mask that is a set of humanoid parts. The scene is very original in its conception of how the mask parts are linked and work around the human's head.*

*(Acknowledgement: The author acknowledges the original copyrighted media source)*



**Figure: Scene from Total Recall, 1990**

*Some parts of the human-computer equipment depicted are the standard gray/silver metallic devices, often of massive scale, that are used in technology centers. They invariably are cold, sinister, and threatening.*

*(Acknowledgement: The author acknowledges the original copyrighted media source)*

### ***Matrix* Trilogy, 1999 and 2003, directed by the Wachowski Brothers**

An iconic, classic sci-fi movie series from the 1990s is the *Matrix Trilogy*, 1999 and 2003, directed by the Wachowski Brothers. The film depicts a future that is primarily a mass fantasy, a simulated reality created by sentient machines to pacify the human population, which is used as an energy source. Strongly influenced by the cyberpunk sci-fi movement, some philosophical and religious ideas, mythic themes, and Hong Kong action films, the movies are famous for their carefully choreographed fight scenes. Memorable HCI moments include the cascading “waterfall” of cryptic alphanumeric symbols, “plugging in” directly to computer systems (and the consequent virtual worlds as the “display,” the use of pills (chemicals) to aid in connecting to computer systems, and the array of CRT display screens that are supposed to convey a world of high technology, but completely overlook the immense complexity of such displays and their likely uselessness. Nevertheless, the imagery is compelling, which is often the point of it all.

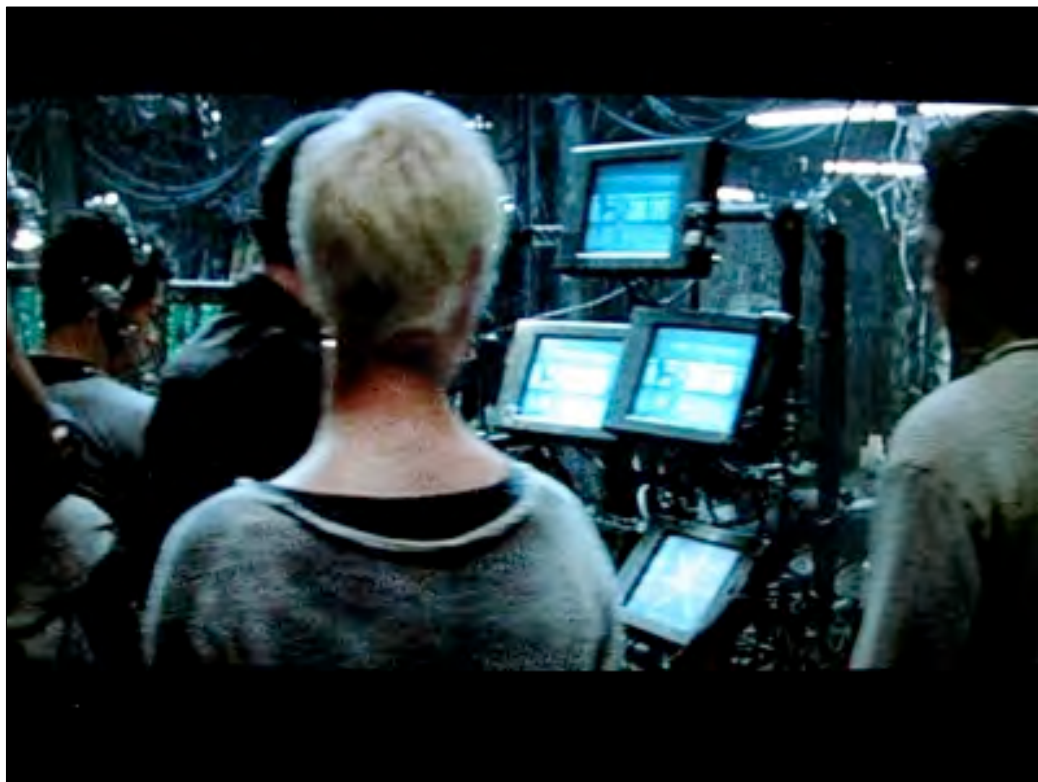
***Figures: Scenes from the Matrix Trilogy, 1999 and 2003.***



***Figure: Scene from the Matrix Trilogy, 1999 and 2003.***

*The Matrix movies provide a variety of HCI tropes or themes. One depicted here is that little pills can help move the user from the “real” world to another.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from the Matrix Trilogy, 1999 and 2003.**

*The Matrix movies provide many scenes of multi-scene monitoring....of what? It is not always clear, but navigation of giant "inner-space" ships as well as the status of crew members sent on missions into the "other" world.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*





**Figure: Scene from the Matrix Trilogy, 1999 and 2003.**

*This Matrix scene shows one of the ultimate of multi-screen displays. Considering that many of them are five to ten feet from the viewer and that most seem to show text-type at normal-reading-distance sizes, it is doubtful that most of them can be read by the diligent seated observer. The entire scene seems calculated to have the “look of meaning,” to convey an impression of high technology that is in fact not likely to be usable, useful, or appealing in reality.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*

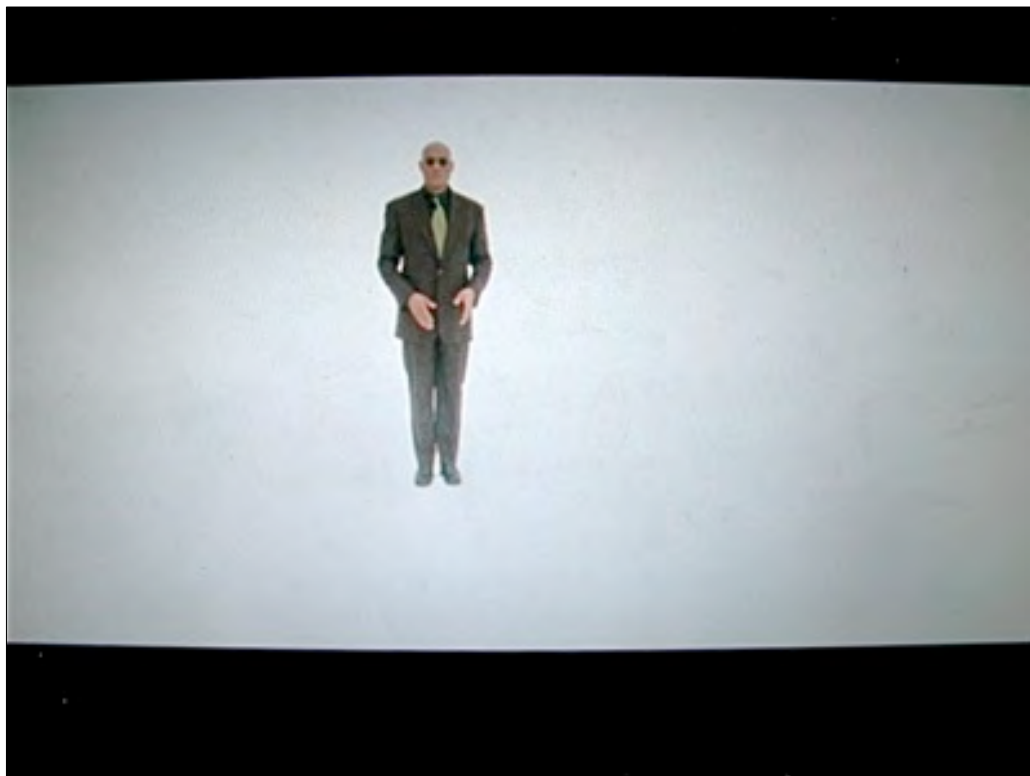




**Figure: Scene from the Matrix Trilogy, 1999 and 2003.**

*Another, iconic, scene from the Matrix movies shows the memorable “raining-down” mysterious characters that were used in the films’ opening titles scenes and posters. The image certainly conveys drama, beauty, and unknown, perhaps, also, unreadable, knowledge. It is unknown if the movie makers were familiar with the late nineteenth-century visible language poet Apollinaire, whose “Il Pleut” also featured letterforms cascading downward in a rainfall effect.*

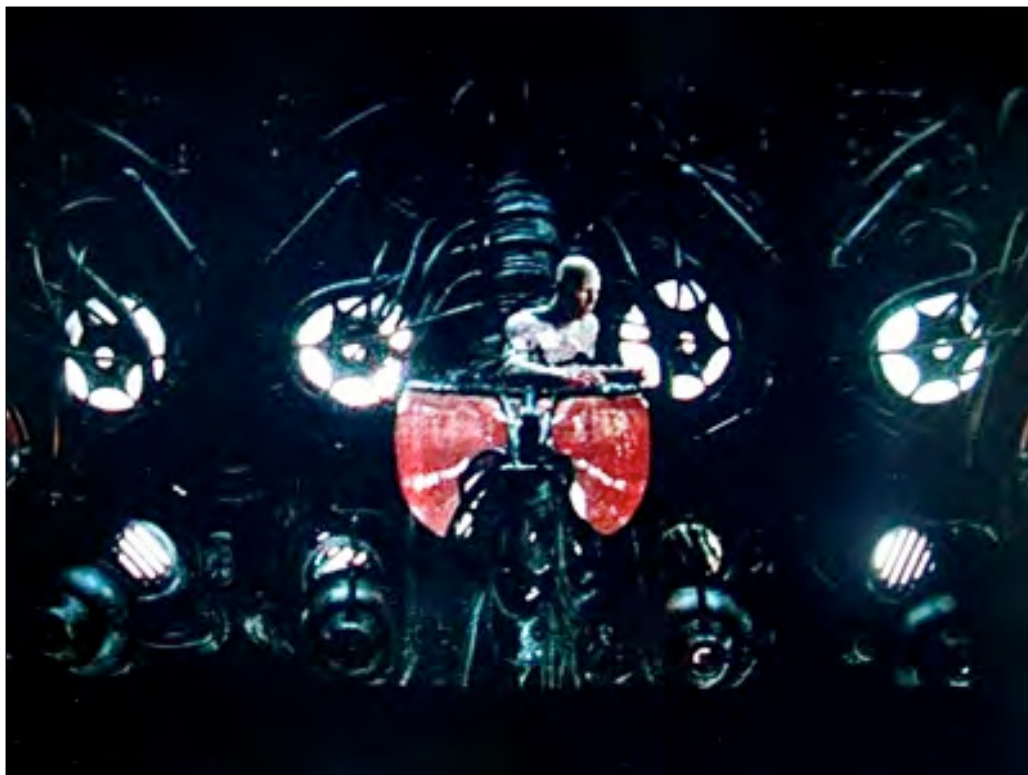
*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from the Matrix Trilogy, 1999 and 2003.**

*In stark contrast to the dark, dense, electronic-mechanical scenes of the Matrix movies, this scene shows one of several scenes shot against white backgrounds suggesting a cerebral, abstract space devoid of typical HCI equipment. These scenes imply the direct-connection of human beings to computer systems that permit the user to enter a completely artificial “mental” or “cognitive” space. The context and visual display characteristics has been used in the final scenes of 2001 (where the hero navigator enters a dream-like environment to encounter his future self).*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from the Matrix Trilogy, 1999 and 2003.**

*The Matrix movies provide a startling premise that human beings are being “grown” as an energy source in a vast array of storage pods as they collectively dream of a false reality in which they participate while alive. Most of the creatures in their fantasy lives seem to inhabit a mid-twentieth-century reality that uses wired telephones, telephone booths, and little or no advanced HCI-based equipment, while their “real” circumstances are governed by advanced computer-systems run amok, against which brave, rebellious human groups are fighting using somewhat advanced HCI-based equipment.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*

***eXistenz*, 1999, directed by David Cronenberg**

Also from 1999 is *eXistenz*, directed by David Cronenberg. The film is unusual in that it treats the world of video games. The HCI aspects are also memorable, featuring biomorphic technology, in fact, bloody technology, in which parts of devices are built from animal tissues and bones. No film until this one had shown such biomorphic technology. One memorable scene features a hero assembling a gun from the plate of food served to him, using teeth as bullets.

**Figures: Scenes from eXistenz, 1999.**



**Figure: Scene from eXistenz, 1999**

*The movie shows unusual, intriguing, and even startlingly innovative HCI scenes in which equipment has an organic, biomorphic “form factor.” The HCI equipment has a combination of “ick” quality and gruesome appeal, somewhat like the nature of bloody highway accidents that cause drive-by traffic to slow down so drivers can gawk and experience empathy, sorrow, and/or schadenfreude.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from eXistenz, 1999**

*Another scene from the movie in which the hero has constructed a pistol from portions of bone and meat served to him in a restaurant. Inserting the “teeth-bullets” into the device, he is about to shoot the waiter who served him.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*





**Figure: Scene from eXistenz, 1999**

*Another innovative HCI moment in the movie in which the character contemplates a shapeless blob of material that is formable into the human-computer connection medium required by the scene.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from eXistenz, 1999**

*The movie shows a variant of the preparation of the body for direct human-computer linkage through the spinal column.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from eXistenz, 1999**

*The movie shows the body now prepared for direct human-computer linkage. The film has almost a medical-movie fixation on body parts, organic materials, blood, and procedures.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from eXistenz, 1999**

*An exemplary scene from the movie that references nodules, nipples, umbilical cords, intestines, and other biomorphic forms in its depictions of buttons, cables, and other HCI hardware.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*

Twentieth-century sci-fi cinema introduced more remarkable technology focusing on HCI themes that had been less dramatically treated in earlier sci films. Gradually filmmakers were absorbing the latest themes of R+D labs of HCI.

***Minority Report*, 2002, directed by Steven Spielberg**

*Minority Report*, 2002, directed by Steven Spielberg and based on a short story by Philip K Dick, raised the general movie-going audiences's awareness of hand gestures, when the actor Tom Cruise famously whisked photos around on a large transparent display. This world of 2054 shows many examples of advanced HCI, including personalized ads that recognizes customers, extensive government surveillance, iris identification, extensive virtual reality, projected three-dimensional images, and other techniques.

**Figures: Scenes from Minority Report, 2002.**



**Figure: Scene from Minority Report, 2002**

*The actor Tom Cruise, as the hero of this film, which might alternatively been titled Dances with Data. He gesticulates with his hands in one of the movies iconic scenes, causing photo imagery to be whisked about on a large, transparent screen. His two hands are clothed in magical “Michael Jackson gloves,” also reminiscent of Jaron Lanier’s virtual-reality manipulation gloves of the 1980s.*

*(Acknowledgement: Twentieth-Century Fox. The author acknowledges the original copyrighted media source.)*

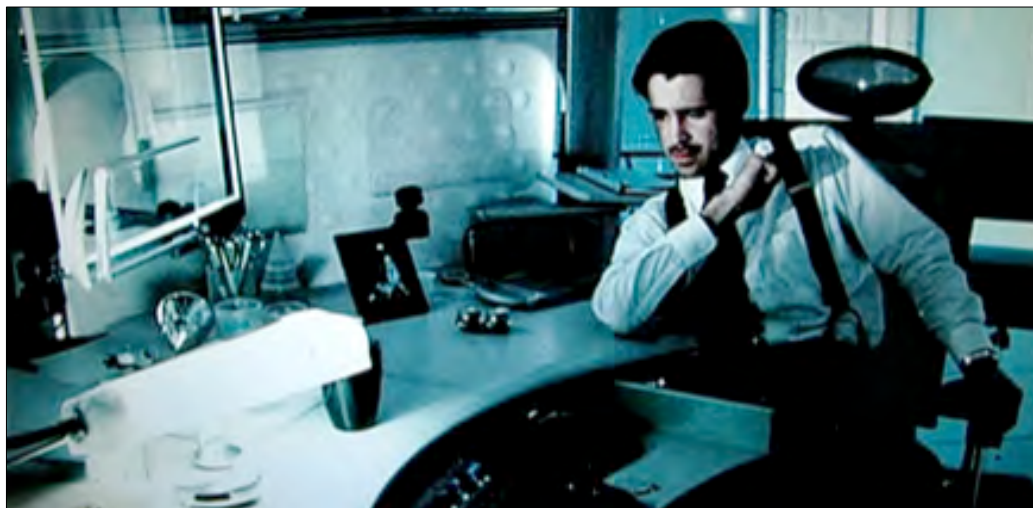




**Figure: Scene from Minority Report, 2002**

*Another view of the famous dancing-with-data environment of the movie. As is typical of many such movie scenes, the room features clean, hard-surface materials, translucent plastic or glass structures, a typical high-tech environment for an advanced crime-prevention environment. These scenes are iconic and stereotypical, constituting a trope of the sci-fi genre for advanced HCI “situation rooms” and are very different from other, more dirty, cluttered scenes of the iconic, stereotypical hacker’s room or rogue laboratory, which are also depicted in the movie.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Minority Report, 2002**

*Another character in the movie contemplates the hero's desk, and its equipment, including a slide-out keyboard and small (but advanced) diskettes containing data. Apparently, these familiar HCI hardware components have not been phased out in the future depicted in the movie.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Minority Report, 2002**

*In manipulating photographic scenes on transparent displays through hand-gestures, while innovative for the movie and the audiences of the time, the HCI command-control circumstances seem to have almost no use for alphanumeric or other icon/symbol depictions so prevalent in today's HCI schemes. Perhaps this is merely the movie-maker's homage to the visual medium vs. text-literature, but might even be a disparagement to written literature vs. the achievements of pictorial storytelling.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Minority Report, 2002**

*One of many scenes in this and other movies showing the back or reverse side of transparent displays. Apparently, the movie-makers have decided that our being able to see text backwards from his perspective is an advantage.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Minority Report, 2002**

*As in other movies, such as the Star Wars and Terminator series, virtual three-dimensional characters are depicted, showing the achievement of three-dimensional projections not requiring any viewing screen. This HCI technique seems to be a favored visual trope of sci-fi films since the 1970s.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*

***Aeon Flux*, 2005, directed by Karyn Kusama**

*Aeon Flux*, 2005, directed by Karyn Kusama, shows many inventive HCI technologies in its story of a post-apocalyptic era. Notable HCI scenes show cameras in the eyes, human beings with two extra hands transplanted to replace feet, pills to enable users to access information spaces, skin displays that show maps on the forearms, and contact lenses to transmit images to other viewers. The notable HCI technology shows the filmmakers' keen interest in HCI advances, which play a significant role in the story line.



**Figure: Scene from Aeon Flux, 2005.**



**Figure: Scene from Aeon Flux, 2005**

*The movie depicts an innovative and remarkable transformation of someone who has decided that it is advantageous to have four hands, not two. This suggests unusual combinations of gesture and manual, especially, typing skills, not normally found in human beings. For office workers, floorboard keyboards might prove handy.*

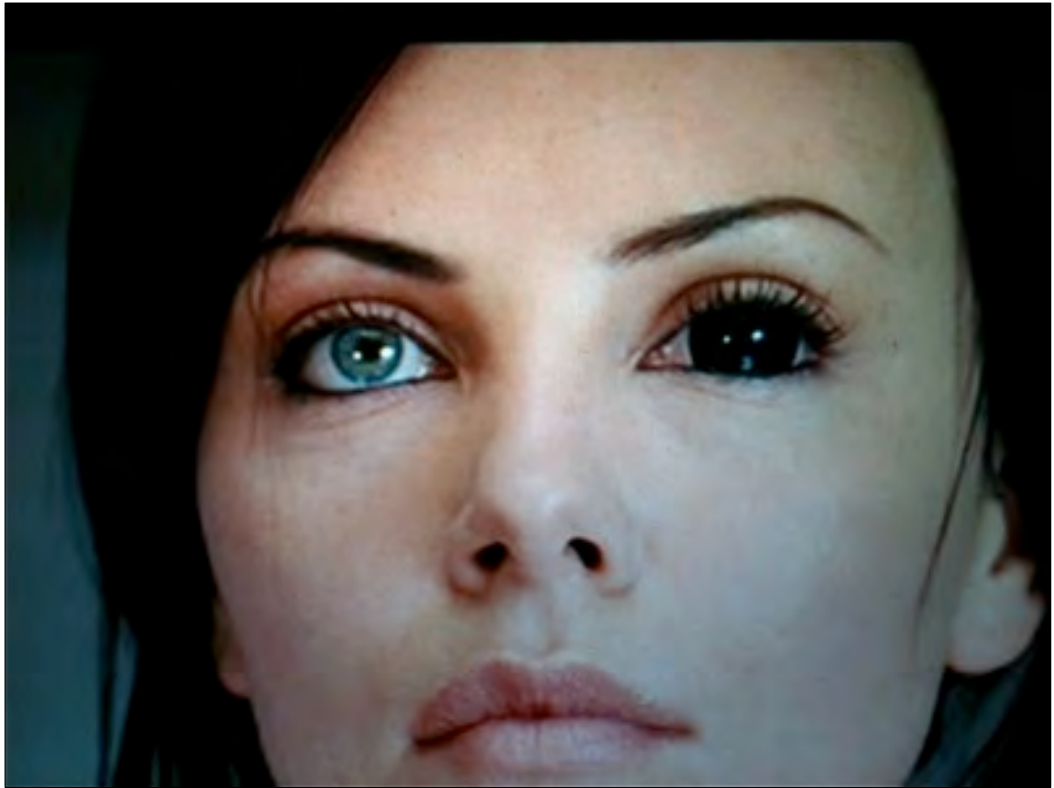
*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Aeon Flux, 2005**

*Another movie innovation shown in Aeon Flux is raised-skin displays. While Nokia has recently patented buzzing or throbbing tattoos that can be attached to the skin and which can receive text messages alerting the wearer, this scene depicts display capabilities embedded in the skin itself, which are visible to the wearer. Another implication is raised-surface skin displays that the blind can sense, meaning they always have with them a readable display surface.*

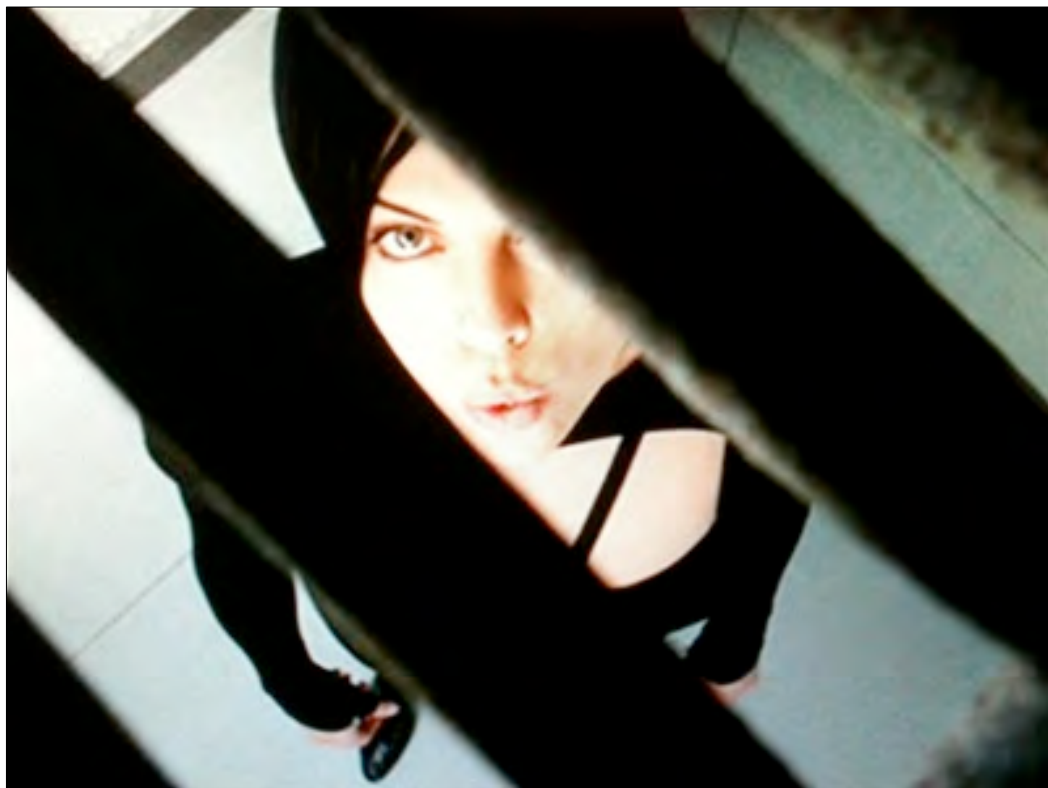
*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Aeon Flux, 2005**

*Another HCI innovation depicted in the movie is an artificial eyeball or iris that can be used to gather and even transmit data/information to the wearer or to others.*

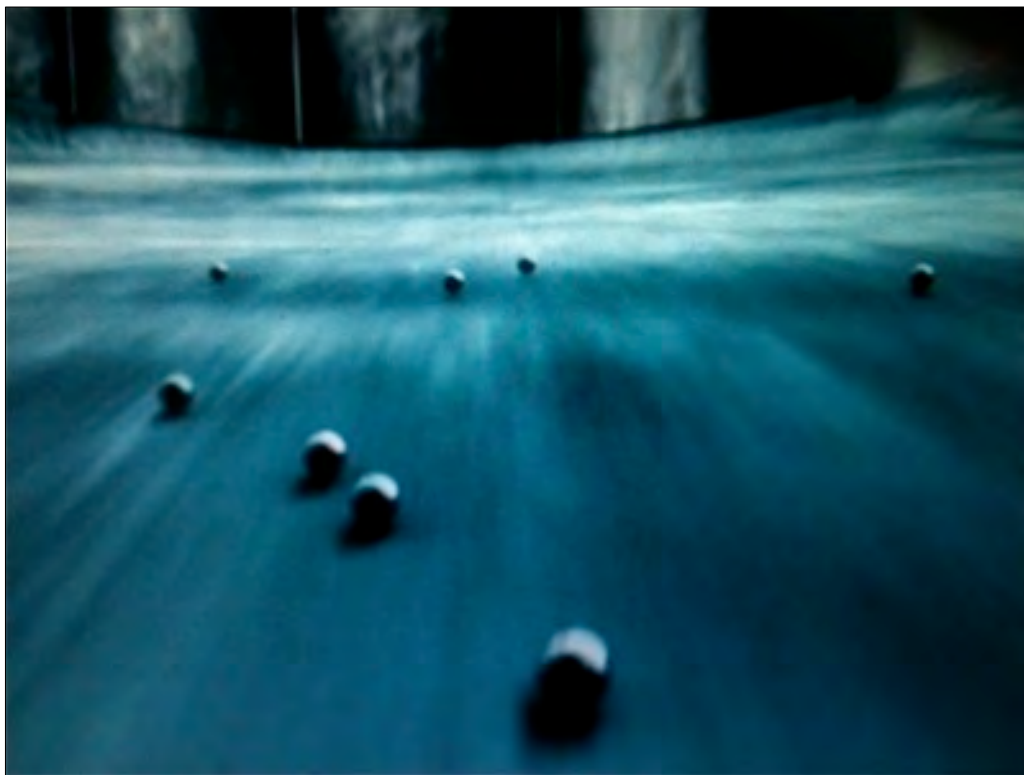
*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Aeon Flux, 2005**

*Throughout this movie, which presents many HCI innovations, the techniques are tossed out at the viewer like so many trinkets of “HCI candy.” Here the heroine whistles to communicate to a fleet of dynamic sensors that are gathering information for her.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Aeon Flux, 2005**

*Here are the heroine's fleet of sensors, the small rolling balls controlled by whistling, which maneuver themselves in the environment to gather information.*

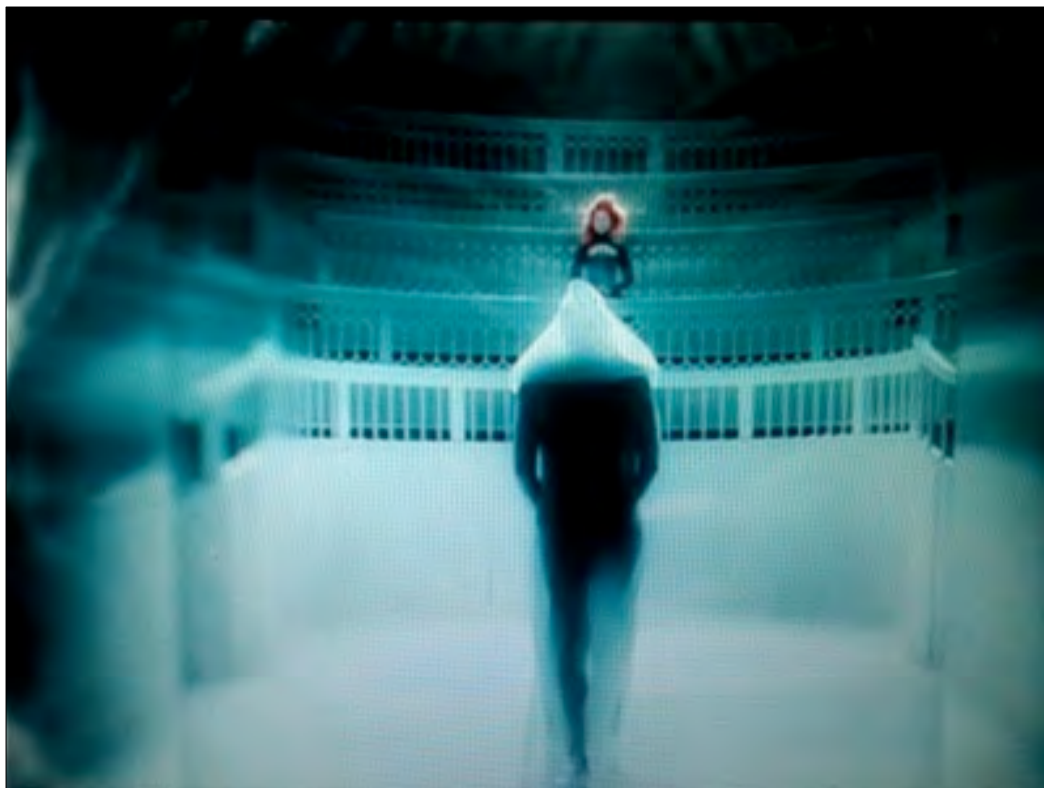
*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Aeon Flux, 2005**

*Another innovative moment occurs when a colleague transfers a crucial “techno-pill” from himself to the heroine. Perhaps somewhere else in filmdom, secret messages have been passed through mouth-to-mouth transmission. In this film, it is only one of many ingenious human-human and human-computer interaction and communication techniques deployed.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Aeon Flux, 2005**

*As similar scenes depicted in the Matrix series and in 2001, the heroine appears in an abstract, mental space enabled by ingesting HCI-enabling pills/chemicals.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



***Ultraviolet*, 2006, written and directed by Kurt Wimmer**

A movie that similarly brings many HCI technology innovations to the screen is *Ultraviolet*, 1978, written and directed by Kurt Wimmer. The depiction of a future world of 2078 after a global epidemic shows such details as paper phones that can be tossed away after using them, transparent displays, a writing system that is indecipherable to us in our time-zone, and large, complex information displays.

**Figures: Scenes from Ultraviolet, 2006.**



**Figure: Scene from Ultraviolet, 2006**

*The movie provides a notable visual HCI theme: the time is so far in the future that our own writing systems as we know them have evolved to the point that the script, not an alien script, is undecipherable to us in our own time.*

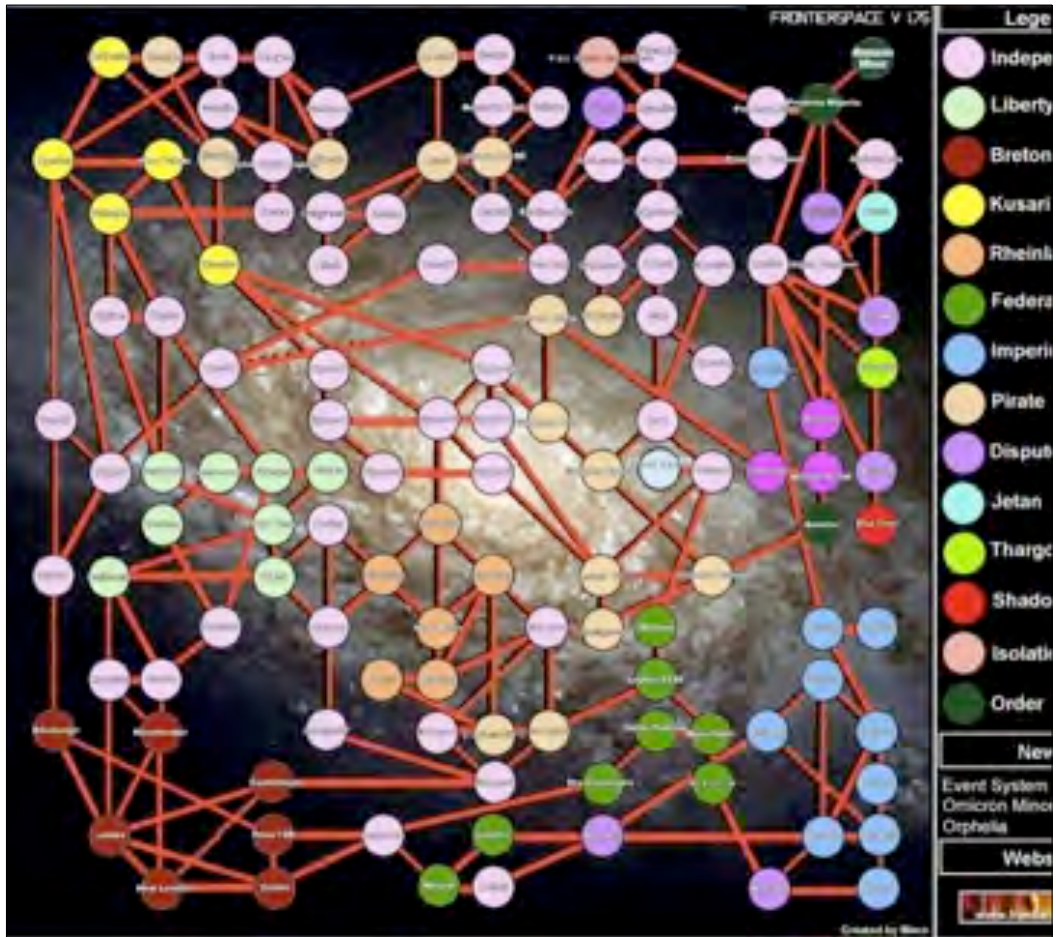
*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Ultraviolet, 2006**

*Another innovation depicted in the movie is that of thin credit-card, or “paper”, possibly “throw-away” phones, perhaps using a plastic substance. These might be stored where we would have kept our credit cards in the old (our current) days.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Ultraviolet, 2006**

*The movie also provides several instances of realistically complex information-visualization displays. These seem convincingly dense and intricate, more elaborate than many shown in sci-fi films and certainly more complex as verbi-visual displays than many of the textual displays in the Matrix series films.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Ultraviolet, 2006**

*The scene depicts a transparent display. Note that the obverse side now appears as a kind of mask viewed in our direction, not merely a readout for the heroine viewer.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Ultraviolet, 2006**

*The user is employing the buttons of a thin, paper-like phone.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*

***Idocracy*, 2006, co-written and directed by Mike Judge**

While most sci-fi films feature extremely intelligent people using sophisticated technology, the sci-fi movie comedy *Idocracy*, 2006, directed by Mike Judge, depicts a below-average hero who sleeps through 500 years to awaken as the smartest man on earth among a dumbed-down population that needs childlike displays and constant reminders of sex to keep them entertained. The depiction of simple HCI scenes is often comical, as when a medical receptionist searches among simple symbols of ailments to diagnose a new patient, but the scenes, language, and human-computer interaction also provides a chilling, depressing view of demented, debased users of the future who think Gatorade is needed for plant nutrition and have trouble subtracting 20 from 30. Despite its lack of boxoffice success, the film has achieved a cult following.



**Figures: Scenes from Idiocracy, 2006.**



**Figure: Scene from Idiocracy, 2006**

*The film presumes that most media communication has been so dumbed down that viewers must be kept amused by naked or half-naked news reporters, similar to current or recent news reportage in Canada, Europe, and elsewhere. Obviously, this suggests a highly sexualized version of all HCI, far beyond the wildest dreams of computer nerds of previous decades.*

*(Acknowledgement: The author acknowledges the original copyrighted media source)*





**Figure: Scene from Idiocracy, 2006**

*The President of the United States, shown here fully armed physically and in terms of weaponry, has been elected by a dumbed-down electorate. He settles some arguments before Congress and committee meetings by simply waving his weapons to make his point. His expertise and experience with HCI devices is presumably limited.*

*(Acknowledgement: The author acknowledges the original copyrighted media source)*



**Figure: Scene from Idiocracy, 2006**

*Signs everywhere point to the decay of literacy, which presumably places enormous burdens on verbal aspects of HCI communication and interaction. This situation is in fact similar to today's HCI challenges in Africa and India for mobile-phone usage: many users are illiterate, but most HCIs around the world currently are targeted to literate users. As in the movie, some HCI communication moves to acoustic/verbal input and pictographic, non-verbal techniques.*

*(Acknowledgement: The author acknowledges the original copyrighted media source)*



**Figure: Scene from Idiocracy, 2006**

*This one scene says much about this world of the future. Most informational displays have been replaced by sexualized primary content, and much of the display area has been taken over by advertisements for rude and crude entertainment. This challenge to effective information design and visualization is already present in television currently, in which advertisements for upcoming shows, “crawling-ants” announcements of breaking news stories or commercial pitches, and other visual elements eat up the primary display space and distract the viewer.*

*(Acknowledgement: The author acknowledges the original copyrighted media source)*

***Avatar*, 2009, written and directed by James Cameron**

James Cameron waited a decade until movie-making animation technology could enable him to present the film he envisioned depicting a society of marauding earthmen (mostly) of about 2150 attempting to obtain the ludicrously named unobtainium of the satellite-world of Pandora, which seems to have a strong feminine leadership. Once again, men, metal, and destructive objects are pitted against wise women, ethereal sensitive animals and plants, and a sense of connectedness, a dialectic featured in several other sci-fi films. The technology depicted seems to favor three-dimensional displays and the ever-present transparent screen displays. The latter seem to have become an iconic representation of advanced technology, much as rotating magnetic tape drives were in decades past. In my humble opinion, the movie is one of the most startling displays of visual imagination ever conceived in the history of film. I could be wrong, but as the first film to gross more than \$2 billion, it seems to be doing something right.



**Figures: Scenes from Avatar, 2009.**



**Figure: Scene from Avatar, 2009.**

*Avatar is a visual extravaganza of a sci-fi movie with live action plus computer-generated imagery. Notable in the film are numerous HCI and/or intelligent-being-to-intelligent-being interaction and communication. The creatures of the planet Pandora engage in the intuitive, empathic, “natural,” “organic” methods of connection, without relying on the electro-mechanical methods of the Earth-people. Here, the blue-colored humanoid denizens and other “beasts” communicate with direct-fibre contact.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*





**Figure: Scene from Avatar, 2009.**

*In this scene, a human and a humanoid avatar are about to become connected. Notice the absence of the metal, glass, plastic, electronics-laden environments so much favored in other sci-fi settings. We have seen this contrast before in Journey to the Planet of Prehistoric Women forty years earlier.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Avatar, 2009.**

*This scene depicts another fibrous, “neuro-organic” image that suggest natural nervous systems, synapses, and other biological connectivity, not electro-mechanical.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Avatar, 2009.**

*The patriarchal (generally male) warriors from Earth surround themselves with metal, plastic, glass, rubber, and complex weaponry as they attempt to master the blue (seemingly matriarchal) society and engage them in what is eventually a losing battle. The contrast of Journey to the Planet of Prehistoric Women is re-enacted again.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Avatar, 2009.**

*In the war-room of the invaders from earth, we see powerful displays of the latest Hollywood imaginings of advanced HUI, including three-dimensional displays, transparent screen surfaces, and much backward typography.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*

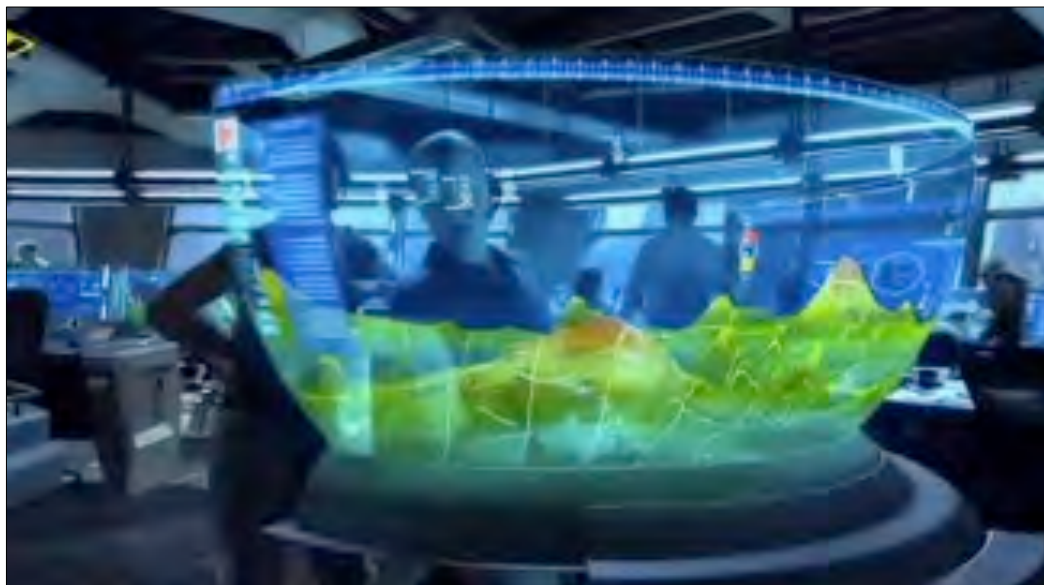




**Figure: Scene from Avatar, 2009.**

*Ocasionaly, there are scenes of control panels, tabbed displays, familiar English phrases and letterforms, and vaguely familiar iconography. The digram seems to exhibit less-than-optimum legibility, but perhaps there is a reason for that condition.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Avatar, 2009.**

*One of the more extravagant three-dimensional displays shows a half-sphere transparent surface capable of depicting a three-dimensional landscape within. It is not clear how one would control or manipulate objects or processes within that display space, but that is probably not the point. It is an impressive visual moment in the cinematic storytelling.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Avatar, 2009.**

*One of many scenes of transparent displays, which causes one to contemplate the importance of RATAVA....until one realizes that is AVATAR backwards. Perhaps it was inserted as a little typographic/visual joke. Impressive displays, but equally impressive is the usability of being able to see all of this content backwards. Current technology, such as Samsung's window display television shown at the Consumer Electronics Show in January 2012 seems partially to have solved the challenge of visual privacy (the back of their one-way window looks like a mirror from the other side) that Hollywood has routinely ignored for several years.*

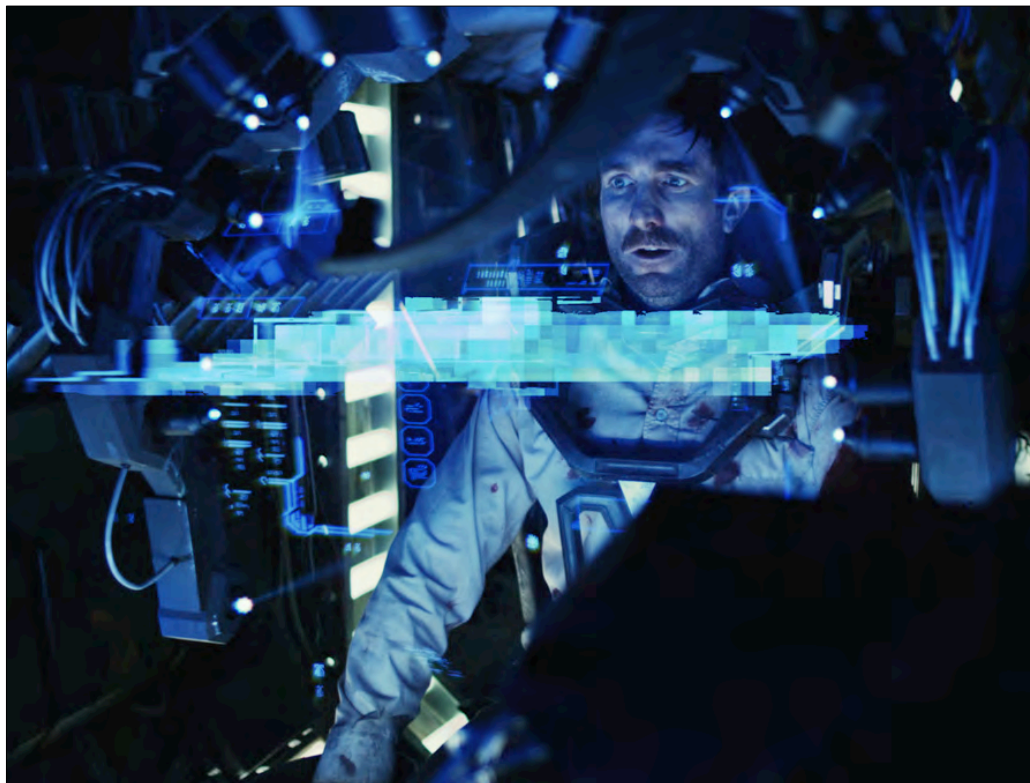
*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



### ***District 9, 2009, Directed by Neill Blomkamp***

District 9, a 2009 South African sci-fi thriller co-written and directed by Neill Blomkamp rightly won a 2010 Saturn Award for Best International Film presented by the Academy of Science, Fiction, Fantasy, and Horror Films and nominated for four Academy Awards in 2010, including Best Picture. Besides exploring themes of xenophobia, failing attempts at social integration, and the history of apartheid in South Africa, the equipment and human-computer interaction scenes are among the most elegant, inventive, and thorough in modern sci-fi film. In one scene, a human hero who is morphing slowly into an alien life form attempts to pilot an alien space ship. The challenges give new dimensions of meaning to user-centered design. Can systems be developed (by alien creatures at least) that are so intelligent they can transform themselves to accommodate an unexpected alien (i.e., human) life form? In another scene, the alien “cockroach-like” creature at last is piloting its own ship. Its three-fingered hand interacts with virtual controls in an elegant, graceful, fast-paced dance of interaction that makes Tom Cruise’s character in *Minority Report* look like a plodding infant. The scene is only seconds long, but conveys powerful implications of creature-machine interaction worthy of longer study. The film is filled with such moments, which makes it a treasure-chest of HCI invention demanding more serious study than most sci-fi movies.

**Figures: Scenes from District 9, 2009.**



**Figure: Scene from District 9, 2009.**

*The hero of the film, a future immigration official in charge of managing alien beings held in special camps, is, surprisingly, able to manipulate the controls of an alien spaceship once he manages to enter it. Somehow, the alien-computer interface is able to adjust to this strange creature (the human being), in a startling, bizarre example of superior user-centered design.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from District 9, 2009.**

*When an alien creature is finally able to enter its space-ship's cockpit and take the controls, its hand maneuvers some user-interface displays in a brief, elegant interaction that makes the hand-waving of Tom Cruise in Minority Report look like child's play.*

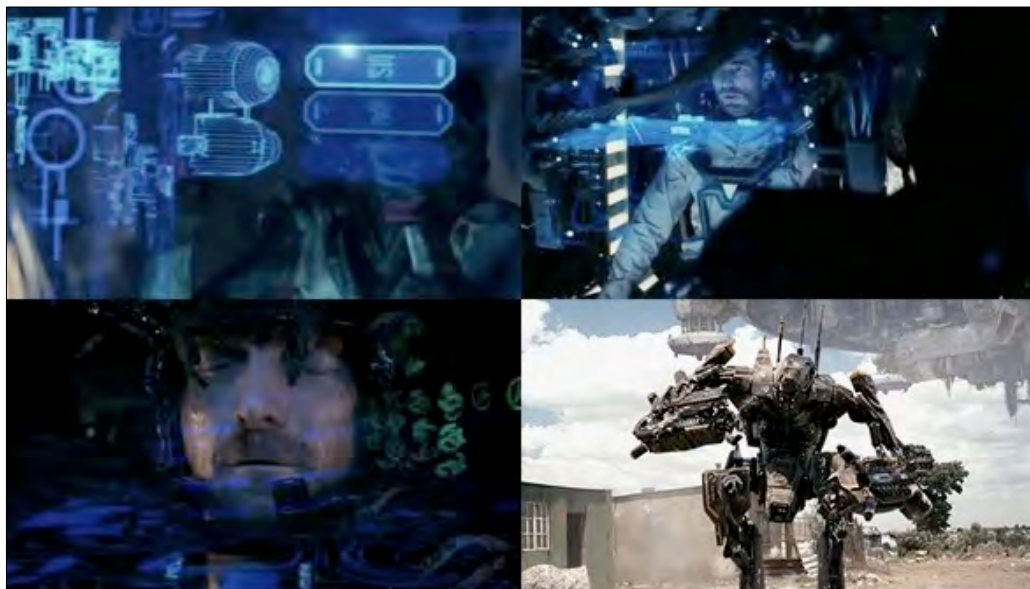
*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from District 9, 2009.**

*The scene depicts another moment when the alien creature is able to manipulate the controls of its rocket-ship.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scenes from District 9, 2009.**

*The collection of scenes shows the human being attempting to manipulate an exoskeleton device made for an alien being, further examples of some alien sophisticated user-centered design that can accommodate a creature unlike any of the “normal” population.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*

## Sci-Fi in HCI Demos

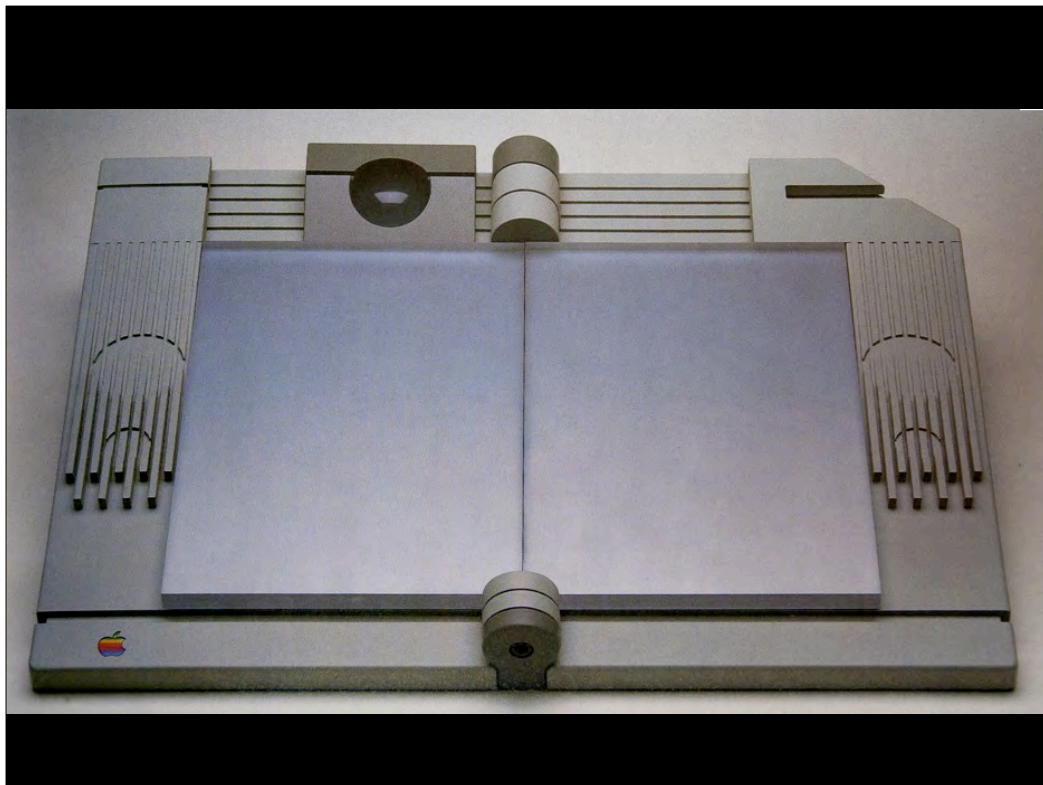
Commercial sci-fi film-makers are not the only ones to present sometimes a skewed, even flawed vision of the future. Many technology companies have made demo videos that depict future products and societies.

Many commercial companies have made advanced product demos that depict future products, future technologies, and future societies. One of the first and most well known was the *Knowledge Navigator* film from Apple Computer in 1992. At the time, the talking avatar that looked like Steve Jobs, the folding screen that resembled a book, and the use of informal vague natural-language queries to a computer system that resulted in quite specific, on-target retrievals, thrilled some HCI professionals and dismayed others, who felt that Apple was inaccurately suggesting the likely achievements of natural language conversations (which we now accept in Siri on the iPhone) but were being used in Apple advertisements to show future products with the implication that they were just around the corner, not 20 years later.

Another example is DARPA's *Augmented Cognition* 2005 demo created by the Hollywood producer/writer/director Bryan Singer, which showed future brain-wave-reading head-sets, but showed inelegant display-screen designs. These display screens looked like inferior examples of 1980-2000 military displays not the "sophisticated" displays of some future war-room of 2020.



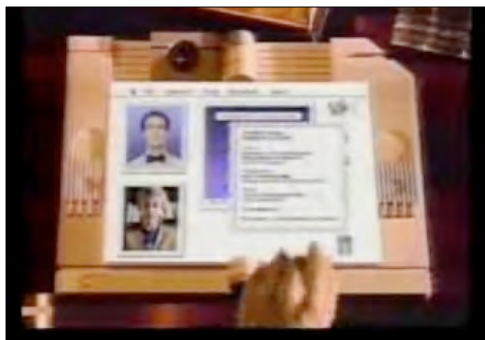
**Figures: Scenes from Knowledge Navigator, 1992.**



**Figure: Scene from Knowledge Navigator, 1992.**

*The scene shows the advanced “Dynabook” (a Xerox PARC concept) that was imagined for a future Macintosh computer. The device featured a folding split screen.*

*(Acknowledgement The author acknowledges the original copyrighted media source.)*

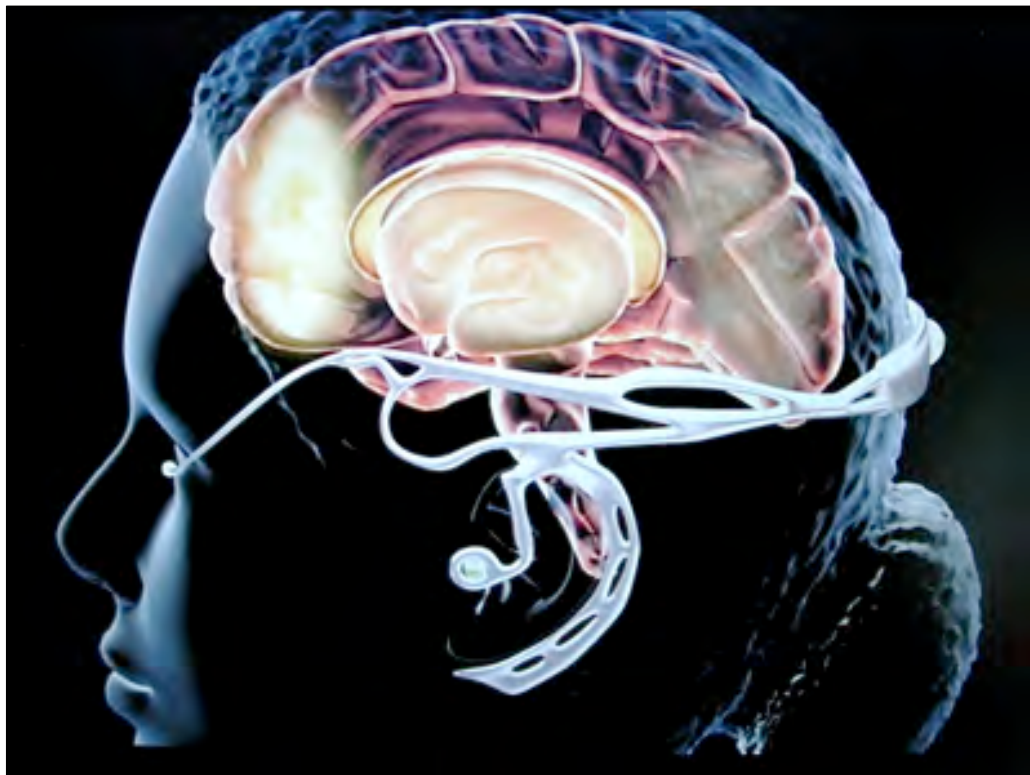


**Figures: Scenes from Knowledge Navigator, 1992.**

*The scenes show the avatar that looked like Steve Jobs. The interaction depicted easy touch screen and voice input to query the computer and to change imagery.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*

**Figures: Scenes from Augmented Cognition, 2005.**



**Figure: Scene from Augmented Cognition, 2005.**

*The Augmented Cognition project proposed sophisticated headsets and software that could monitor brain activity and switch communication media from visual to aural if the computer determined that the user's channel were becoming overloaded. The context was a war-room decision making group examining and analyzing the latest news from multiple sources.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scenes from Augmented Cognition, 2005.**

*The scene shows the wearing the headset that enables the computer to track the user's viewing direction.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Augmented Cognition, 2005.**

*An example of clumsy, unsophisticated user-interface design reminiscent of military displays from a decade earlier. The use of justified text in a small area is especially egregious, in addition to the vertical text rows at the left and right.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Augmented Cognition, 2005.**

*A user contemplates complex visual displays that would tax any knowledge-worker's abilities. Especially unfriendly are the vertical text rows.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*



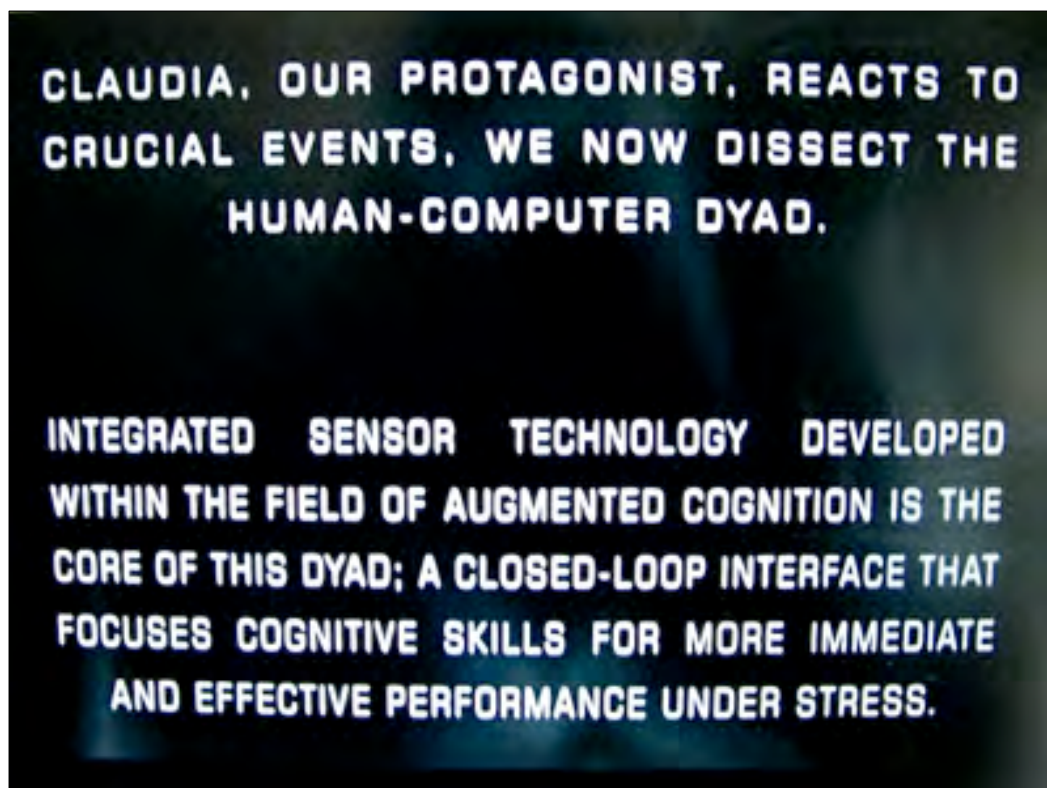


**Figure: Scene from Augmented Cognition, 2005.**

*Another scene of unsophisticated graphical user-interface display design for what is intended to be a highly sophisticated technology advance.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*





*Figure: Scene from Augmented Cognition, 2005.*

*This crude, poorly readable text display, somewhat similar to the earliest silent-movie dialogues and scene-setting title screens (but probably not intended to make that cinema-history reference) shows the lack of typographic sensibility that is evident throughout the video.*

*(Acknowledgement: The author acknowledges the original copyrighted media source.)*

## HCI in Sci-Fi of Other Countries and Cultures

Lest this survey of HCI in sci-fi cinema appear to be overly biased towards Hollywood, North America, and Europe, I call attention to some of the extensive sci-fi films of India and China, which are numerous, but not well known to European and North-American viewers.

Sci-fi film-makers in these countries have been inspired by some of the classic Western novels as well as their own literature traditions. They have produced films that reflect their unique cultural heritages, much as Bollywood films combine traditional storytelling with music and dance quite unlike most of the products of Hollywood.

The study of Indian and Chinese approaches to metaphors, mental models, navigation, interaction, and appearance, where it is not a derivative copy of Western approaches but more revealing creations based on different cultures, will, I believe, be worth much further study. Additional studies may reveal cross-cultural influences of one genre upon the other, *e.g.*, the Hollywood influence on Indian sci-fi, or the Hong Kong action-films influence on Hollywood sci-fi. With the rise of multiple film production centers, including a new animation center being started in Shanghai under the auspices of Robin King, a Master of the De Tao Masters Academy of Beijing [King], it is possible that the influences may run in multiple directions in the decades ahead. Already, India has shown a desire to produce comic books featuring Hindu deities as super-heros and heroines instead of the classic Western Superman and other characters.

Unfortunately, it has not been easy for me to locate appropriate scenes from these films that show HCI interaction and appearance. At the very least I cite some of them and urge readers to investigate further. The primary resource for these lists comes from Wikipedia entries (with apologies to academia).

### **Indian Sci-Fi Films**

Indian sci-fi films since 1952 include the following. I provide brief comments on some to help the reader appreciate the accomplishments of the film. Note that in India, many of the films are produced in a variety of languages. India itself has about 22 national languages, which means production houses must translate films and/or provide subtitles in many languages even for its domestic market.

*Action Replay* (*sic*, formerly *Action Replay*), Hindi, 2010. This Indian sci-fi romantic comedy film was based on the 1985 Hollywood blockbuster *Back to the Future*.

*Aditya 369*, Tulu.

*Bharathan*, Malayalam.

*Dasavathaaram*, Tamil. The third-highest-grossing Indian film. The story features a USA virus that threatens Earth.

*Enthiran*, Tamil, 2010. A scientist makes a robot, lives with it, and adds emotions. Alas,

the robot falls in love with the scientist's girlfriend. The film was the most expensive India film made and the highest grossing film.

*Jaithra Yaathra*, 1987, Malayalam. A scientist invents a locket to make himself invisible and battles a villain.

*Kaadu* (The Jungle), 1952, Tamil-American. The first sci-fi film in Tamil Nadu tells of expedition finding the cause of strange behavior of animals. The film features an invasion of woolly mammoths.

*Kalai Arasi*, c. 1960, Tamil. Aliens kidnap an Earth girl to teach them the arts; a hero rescues her.

*Karutha Rathrikal*, 1967, Malayam. A doctor takes revenge on his uncle's death with medicine he invented that creates a split personality. This is the first Malayam sci-fi film.

*Koi... Mil Gaya*, 2003, Bollywood. An alien visits the earth, similar to ET. The film is a kind of Indian *Alien*.

*Krrish*, Hindi. A super-hero film.

*Mr. India*, Hindi. A super-hero film, with super-hero Indian stars.

*Patalghar*, Bengali. An alien visits India.

*Rudraksh*, 2004, Hindi. An action-adventure, the film was based on Ramayana classical literature .

*The Alien*, late 1960s, canceled. Alien Mr. Ang visits a Bengali urbanite.

### **Chinese Sci-Fi Films**

Chinese sci-fi film making seems to have started earlier than Indian. Jules Verne stories were imported into China during the late nineteenth and early twentieth centuries. *Yueqiu Zhimindi Xiaoshuo* (月球殖民地小說) (Lunar Colony), 1904, seems to be the earliest original Chinese Sci-Fi writing. Zheng Wenguang, father of modern Chinese science-fiction literature, wrote in 50s, 70s, e.g., *Flying to the Centaur*. Among other sci-fi films are the following (citations taken from Wikipedia, with apologies to academia):

*Death Ray on Coral Island*, 1980. Tong Enzheng wrote "Death Ray on a Coral Island" which was made into China's first Sci-Fi movie. A blogger, Dean Pickles, comments on the film [Pickles]: In "Death Ray," a good-hearted team of Chinese scientists, based in what appears to be San Francisco, finally succeed in completing their fabulous futuristic invention. That is, until the sinister back-stabbing Americans, played with Bond-villainous glee by Chinese actors in whiteface and prosthetic noses, decide to steal the invention for their evil plots. They use sabotage, death-ray guns, murder, and even cocktails, to get what they want. The head scientist, shortly after being gunned down with a ...laser and left for dead, hands off the circuit board to his brave son-in-law. "Take this, and flee!" But those lousy Americans don't give up... they shoot down

the kid's plane over shark-infested, death-ray-filled waters, and he ends up on a mysterious Dr Moreau island.

Tong authored a textbook about cultural anthropology and specialized in early southwest China. In science-fiction, he wrote the short story "Death Ray on a Coral Island", which won an award for China's best short story in 1978 and which was later adapted to film. He died in the US after fleeing China following the government's crackdown on protests at Tiananmen Square.

*Raise the Red Lantern*, 1991. This film, not strictly a sci-fi film, has been cited as one because it depicts almost a parallel world in great detail.

**Figures: Scenes from Death Ray on a Coral Island (1980).**



**Figure: Scene from Death Ray on a Coral Island (1980).**

*Modern-looking white-coated technicians use the latest current technology. The color scheme features the typical white, blue, gray, and black of modern high-tech interiors. Note the use of what seems to be a wall-chart of something like the Periodic Table of the Elements in the background to lend an authoritative scientific aura to the scene.*

*(Acknowledgment: The author acknowledges the original copyrighted media source.)*



**Figure: Scene from Death Ray on a Coral Island (1980).**

*The scientists/technologists stare pointedly at multiple screen displays in a scene depicted in many other Western sci-fi movies that seemingly wish to convey massive technology, and massive data. Note the use of a conventional office desk phone on top of the control panel rather than individual head-sets. Perhaps in an emergency all might dive for the one phone to contact others.*

*(Acknowledgment: The author acknowledges the original copyrighted media source.)*





**Figure: Scene from Death Ray on a Coral Island (1980).**

*As in other Western sci-fi films of the time, large-scale wall video displays help to convey advanced technology.*

*(Acknowledgment: The author acknowledges the original copyrighted media source.)*

## Concluding Comments

This survey provides the space to include examples of HCI within movies and videos that I presented in my keynote address at the Mensch und Komputer Conference 2011 in Chemnitz, Germany. I am grateful to Prof. Prof. Dr. Maximilian Eibl and to Dr. Arne Berger for the invitation to present the results of my study (see the online video cited in the Bibliography). I am especially pleased that I have space to cite some of the extensive sci-fi films of India and China, but less well known to European and North-American viewers.

As I tried to make clear at the beginning of this essay, science-fiction movies and the depiction of human-computer interaction and communication have, of necessity, been closely intertwined. Cross-cultural sci-fi and HCI trends, patterns, and issues remain largely unexplored.

Sci-fi movies (and videos) have been always closely linked to HCI and communication, even if a minor element in their storytelling. In some of these media examples, HCI plays a more central role. In all these examples, sci-fi media could serve as unusual, interesting, and potentially valuable material on which to run heuristic evaluations of the design. There might emerge a new class of heuristics: what principles should we follow to make sure that alien creatures can use our products and services, or, conversely, how should we evaluate alien displays and equipment in terms of their use by human beings. In an oddly ironic twist, "normal" human beings might be classed as "disabled" or "less-abled" creatures, much like our world now classes some individuals with different perceptual or cognitive abilities.

Sci-fi film-makers might benefit from more skilled and extensive use of HCI professionals in making their movies (almost none are ever credited). As a consequence, viewers might be exposed to some of the truly latest technologies of R+D centers (not pop versions of these), including spherical sound, the Internet of objects, sophisticated personalization and location technologies, and virtual interactions. Perhaps then we would move beyond the transparent displays of backwards type and imagery on which Hollywood and other movie-production centers have currently fixated.

Likewise, advanced technology R+D centers could benefit by the inclusion of more visiting or "resident" science-fiction authors/futurists as consultants in dreaming up innovative approaches that stretch the imagination of engineers, marketers, business managers, and user-experience designers involved in developing new approaches to HCI. Bruce Sterling, a science-fiction writer has served in that capacity. Brian David Johnson, a futurist at Intel is another. There should be more.

Each world could learn from the "aliens" of the other.

In 1992 and 1999, I introduced Cyberpunk sci-fi novelists to SIGCHI conferences, inviting these authors to predict the future of HCI. This kind of visit from "outer space" should occur on a more regular basis. The HCI literature has not yet explored sufficiently much of sci-fi's latest trends, patterns, and predictions. Perhaps now it's time to look more deeply. The evidence of the last 100 years of imagining and visualizing the future

is now more readily available to researchers, analysts, and designers through films and videos than ever before. The challenges and opportunities of looking, listening, and learning from the past visions of the future and across professional boundaries remain to be explored for the benefit of all.

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## **Appendix: Movie Production and Distribution Companies**

As a tribute to and acknowledgement of the HCI world's indebtedness to the movie and television industry, the following list identifies some, but not possibly all companies that have produced and/or distributed most of the movies mentioned in this document.

### **2001: A Space Odyssey (1968)**

#### ***Production Companies***

- Metro-Goldwyn-Mayer (MGM)
- Stanley Kubrick Productions (as A Stanley Kubrick Production)

#### ***Distributors***

- Metro-Goldwyn-Mayer (MGM) (1968) (USA) (theatrical) (as MGM/UA)
- Cinéma International Corporation (CIC) (1968) (Sweden) (theatrical)
- Metro-Goldwyn-Mayer (MGM) (1968) (Sweden) (theatrical)
- Filmipaja (1968) (Finland) (theatrical)
- Metro-Goldwyn-Mayer (MGM) (1968) (France) (theatrical)
- National Broadcasting Company (NBC) (1977) (USA) (TV) (broadcast premiere)
- MGM/UA Home Entertainment (1991) (USA) (video) (laserdisc)
- MGM/UA Home Entertainment (1993) (USA) (video) (laserdisc)
- MGM/UA Home Entertainment (1997) (USA) (VHS)
- MGM/UA Home Entertainment (1997) (USA) (video) (laserdisc)
- MGM/UA Home Entertainment (1998) (USA) (DVD)
- Turner Entertainment (1999) (USA) (VHS)
- Warner Home Video (1999) (USA) (VHS)
- Warner Home Video (2000) (USA) (DVD)
- Warner Bros. (2001) (Germany) (theatrical) (re-release)
- Warner Bros. (2001) (France) (theatrical) (re-release)
- Warner Bros. (2001) (Japan) (theatrical) (re-release)
- Warner Home Video (2001) (Italy) (DVD)
- Warner Home Video (2001) (Netherlands) (DVD)
- Warner Home Video (2001) (USA) (DVD)
- Argentina Video Home (2002) (Argentina) (DVD)
- Argentina Video Home (2002) (Argentina) (VHS) (re-release)
- Warner Bros. (2002) (Argentina) (all media) (re-release)
- Warner Home Video (2007) (Italy) (DVD) (special edition)
  
- Warner Home Video (2007) (Netherlands) (DVD) (Blu-Ray Disc)
- Warner Home Video (2007) (Netherlands) (DVD) (two-disc special edition)
- Cinema International Corporation (CIC) (1968) (Italy) (theatrical)
- Argentina Video Home (????) (Argentina) (VHS)

- Criterion Collection, The (????) (USA) (video) (laserdisc)
- Esselte Video (????) (Sweden) (VHS)
- MGM/CBS Home Video (1981) (USA) (video) (CED VideoDisc)
- Sandrews (2001) (Sweden) (DVD)
- Varus Video (????) (Russia) (VHS)
- Warner Home Video (2007) (Sweden) (DVD)
- Warner Home Video (2007) (Sweden) (DVD) (Blu-Ray Disc)
- Warner Home Video (2007) (Sweden) (DVD) (HD-DVD)
- Warner Home Video (????) (USA) (VHS)
- Warner Home Video (????) (Brazil) (DVD)
- Warner Home Video (????) (Brazil) (VHS)

## **Aeon Flux (2005)**

### ***Production Companies***

- Paramount Pictures
- Lakeshore Entertainment
- Valhalla Motion Pictures
- MTV Films
- MTV Productions
- Colossal Pictures

### ***Distributors***

- Paramount Pictures (2005) (USA) (theatrical)
- Bontonfilm (2006) (Czech Republic) (theatrical)
- Solar Entertainment (2006) (Philippines) (theatrical)
- United International Pictures (UIP) (2006) (Switzerland) (theatrical)
- United International Pictures (UIP) (2006) (France) (theatrical)
- United International Pictures (UIP) (2006) (Greece) (theatrical)
- United International Pictures (UIP) (2006) (Netherlands) (theatrical)
- United International Pictures (UIP) (2005) (Singapore) (theatrical)
- Argentina Video Home (2006) (Argentina) (DVD)
- Film1 (2007) (Netherlands) (TV) (limited)
- Filmax (2006) (Spain) (all media)
- Odeon (2006) (Greece) (DVD)
- Paramount Home Entertainment (2006) (Brazil) (DVD)
- Paramount Home Entertainment (2006) (Finland) (DVD)
- Paramount Home Entertainment (2006) (Netherlands) (DVD)
- Paramount Home Entertainment (2006) (USA) (DVD)
- Paramount Home Entertainment (2008) (USA) (DVD) (Blu-ray)
- United International Pictures (UIP) (2006) (Argentina) (all media)
- Veronica (2008) (Netherlands) (TV)

## **Avatar (2009)**

### ***Production Companies***

- Twentieth Century Fox Film Corporation (presentation) (as Twentieth Century Fox)
- Dune Entertainment (in association with)
- Ingenious Film Partners (in association with)
- Lightstorm Entertainment (as A Lightstorm Entertainment Production)

### ***Distributors***

- Twentieth Century Fox Film Corporation (2009) (USA) (theatrical) (as 20th Century Fox) (A New Corporation Company)
- FS Film Oy (2009) (Finland) (theatrical)
- FS Film Oy (2010) (Finland) (DVD) (Blu-ray)
- 20th Century Fox Australia (2009) (Australia) (theatrical)
- 20th Century Fox Australia (2009) (New Zealand) (theatrical)
- 20th Century Fox Netherlands (2009) (Netherlands) (theatrical) (through Warner Bros.)
- 20th Century Fox (2009) (Belgium) (theatrical)
- 20th Century Fox (2009) (Canada) (theatrical)
- 20th Century Fox (2009) (France) (theatrical)
- 20th Century Fox (2009) (Japan) (theatrical)
- 20th Century Fox (2009) (Malaysia) (theatrical)
- 20th Century Fox (2009) (Sweden) (theatrical)
- 20th Century Fox (2009) (Singapore) (theatrical)
- 20th Century Fox de Argentina (2010) (Argentina) (theatrical)
- 20th Century Fox of Germany (2009) (Germany) (theatrical)
- Bontonfilm (2009) (Czech Republic) (theatrical)
- Castello Lopes Multimédia (2009) (Portugal) (theatrical)
- Forum Cinemas (2009) (Estonia) (theatrical)
- Forum Cinemas (2009) (Lithuania) (theatrical)
- Forum Cinemas (2009) (Latvia) (theatrical)
- Odeon (2009) (Greece) (theatrical)
- Tatrafilm (2009) (Slovakia) (theatrical)
- Twentieth Century Fox C.I.S. (2009) (Belarus) (theatrical)
- Twentieth Century Fox C.I.S. (2009) (Kazakhstan) (theatrical)
- Twentieth Century Fox C.I.S. (2009) (Russia) (theatrical)
- Warner Bros. (2009) (Netherlands) (theatrical) (through)
- 20th Century Fox Home Entertainment (2010) (Argentina) (DVD)
- 20th Century Fox Home Entertainment (2010) (Argentina) (DVD) (Blu-ray)
- 20th Century Fox Home Entertainment (2010) (Belgium) (DVD)
- 20th Century Fox Home Entertainment (2010) (Belgium) (DVD) (Blu-ray)
- 20th Century Fox Home Entertainment (2010) (Canada) (DVD)
- 20th Century Fox Home Entertainment (2010) (UK) (DVD)
- 20th Century Fox Home Entertainment (2010) (UK) (DVD) (Blu-ray)

- 20th Century Fox Home Entertainment (2010) (USA) (DVD)
- 20th Century Fox Home Entertainment (2010) (USA) (DVD) (Blu-ray)
- FX Network (2012) (USA) (TV) (cable)
- Film1 (2011) (Netherlands) (TV) (limited)
- Home Box Office (HBO) (2010) (USA) (TV)
- Nippon Television Network Corporation (NTV) (2012) (Japan) (TV)
- RTL Entertainment (2012) (Netherlands) (TV) (RTL4)
- Sea Movies (2009) (worldwide) (all media) (non-theatrical)
- Twentieth Century Fox Home Entertainment Germany (2010) (Germany) (DVD)
- Twentieth Century Fox Home Entertainment Germany (2010) (Germany) (DVD) (Blu-ray)
- Twentieth Century Fox Home Entertainment (2010) (Netherlands) (DVD)
- Twentieth Century Fox Home Entertainment (2010) (Netherlands) (DVD) (3-disc collector's edition)
- Twentieth Century Fox Home Entertainment (2010) (Netherlands) (DVD) (Blu-ray)
- Twentieth Century Fox Home Entertainment (2010) (Netherlands) (DVD) (Blu-ray) (3-disc collector's edition)

## **Brazil (1985)**

### ***Production Companies***

- Embassy International Pictures

### ***Distributors***

- Universal Pictures (1985) (USA) (theatrical)
- 20th Century Fox (1985) (France) (theatrical)
- 20th Century Fox (1986) (Japan) (theatrical)
- 20th Century Fox of Germany (1985) (Germany) (theatrical)
- Fox Film (1985) (Sweden) (theatrical)
- Oy Europa Vision AB (1985) (Finland) (theatrical)
- MCA Home Video (1986) (USA) (VHS) (pan and san)
- 20th Century Fox Italia (2003) (Italy) (DVD) (director's cut)
- Cinequanon (1997) (Japan) (theatrical)
- Geneon Entertainment (2003) (Japan) (DVD)
- Twentieth Century Fox Home Entertainment Germany (2003) (Germany) (DVD)
- Criterion Collection, The (2004) (USA) (DVD)
- Süddeutsche Zeitung (2005) (Germany) (DVD)
- Movie Plus (2007) (Japan) (TV)
- Twentieth Century Fox Home Entertainment Germany (2009) (Germany) (DVD)
- 20th Century Fox Home Entertainment (Brazil) (DVD)
- 20th Century Fox (UK)
- Asociace Českých Filmových Klubu (ACFK) (Czech Republic)



- Criterion Collection, The (USA) (laserdisc)
- Flashstar Home Video (Brazil) (VHS)
- MCA/Universal Home Video (USA) (laserdisc)
- Transeuropa Video Entertainment (TVE) (198?) (Argentina) (VHS)
- Universal Home Entertainment (USA) (DVD)
- Universal Studios Home Entertainment (2011) (USA) (DVD) (Blu-ray)
- Warner Home Video (UK) (video)
- Warner Home Video (USA) (laserdisc)

### **[Captain Video (TV Series) (1950s)]**

#### **Captain Video and His Video Rangers (1949-1955)**

##### ***Production Companies***

- DuMont Television Network

##### ***Distributors***

- DuMont Television Network (1949-1955) (USA) (TV)

#### **Captain Video, Master of the Stratosphere (1951)**

##### ***Production Companies***

- Columbia Pictures Corporation

##### ***Distributors***

- Columbia Pictures (1951) (USA) (theatrical)
- Columbia Pictures Corporation (1951) (UK) (theatrical)
- Columbia Films (1951) (France) (theatrical)
- Columbia Films (1951) (Belgium) (theatrical)
- Columbia Film Aktiebolag (1951) (Sweden) (theatrical)
- Columbia Film Aktieselskap (1951) (Denmark) (theatrical)
- Consorzio Cinematografico (1951) (Italy) (theatrical)
- Columbia Pictures of Argentina (1951) (Argentina) (theatrical)
- Christiaan van der Ree (1951) (Venezuela) (theatrical)
- Medal Film Exchange (1951) (Puerto Rico) (theatrical)
- Columbia Pictures de Cuba (1951) (Cuba) (theatrical)
- Columbia Pictures (1958) (USA) (theatrical) (re-release)
- Columbia Pictures Corporation (1963) (UK) (theatrical) (re-release)
- Columbia Pictures of Chile (1963) (Chile) (theatrical) (re-release)

- Columbia Pictures do Brasil (1963) (Brazil) (theatrical) (re-release)
- Medal Fim Exchange (1963) (Puerto Rico) (theatrical) (re-release)
- Christiaan van der Ree (1963) (Venezuela) (theatrical) (re-release)
- Columbia Pictures (1963) (USA) (theatrical) (re-release)
- R&B Video (2004) (USA) (DVD)
- R&B Video (2004) (USA) (VHS)
- VCI Home Video (2005) (USA) (DVD)
- VCI Entertainment (2011) (worldwide) (DVD)

## **District 9 (2009)**

### ***Production Companies***

- TriStar Pictures (in association with)
- Block / Hanson (in association with)
- WingNut Films (as A Wingnut Films Production)
- Canadian Film or Video Production Tax Credit (CPTC) (with the participation of)
- District 9
- Key Creatives (uncredited)
- New Zealand Post Digital and Visual Effects Grant (with the participation of)
- Province of British Columbia Production Services Tax Credit (with the participation of)
- QED International (uncredited)
- The Department of Trade and Industry of South Africa (produced with the assistance of)

### ***Distributors***

- Audio Visual Entertainment (2009) (Greece) (theatrical)
- Buena Vista Sony Pictures Releasing (BVSPR) (2009) (Russia) (theatrical)
- Cathay-Keris Films (2009) (Singapore) (theatrical)
- Columbia TriStar Warner Filmes de Portugal (2009) (Portugal) (theatrical)
- FS Film Oy (2009) (Finland) (theatrical)
- GAGA (2010) (Japan) (theatrical)
- ITI Cinema (2009) (Poland) (theatrical)
- Metropolitan Filmexport (2009) (France) (theatrical)
- QED International (2009) (Non-USA) (theatrical) (international sales)
- Sony Pictures Releasing Canada (2009) (Canada) (theatrical)
- Sony Pictures Releasing (2009) (Argentina) (theatrical)
- Sony Pictures Releasing (2009) (Belgium) (theatrical)
- Sony Pictures Releasing (2009) (Germany) (theatrical)
- Sony Pictures Releasing (2009) (UK) (theatrical)
- Sony Pictures Releasing (2009) (Italy) (theatrical)
- Sony Pictures Releasing (2009) (Netherlands) (theatrical)
- Sony Pictures Releasing (2009) (Portugal) (theatrical)
- Svensk Filmindustri (SF) (2009) (Sweden) (theatrical)

- TriStar Pictures (2009) (USA) (theatrical) (as TriStar) (a Sony Pictures Entertainment company)
- Viva International Pictures (2009) (Philippines) (theatrical)
- Warner Bros. (2010) (Japan) (theatrical)
- Blue Sky Media (2009) (Czech Republic) (all media)
- FS Film Oy (2010) (Finland) (DVD) (Blu-ray)
- RTL Entertainment (2011) (Netherlands) (TV) (RTL5)
- Seven 7 / Metropolitan Filmexport (2010) (France) (DVD)
- Seven 7 / Metropolitan Filmexport (2010) (France) (DVD) (Blu-ray)
- Sony Pictures Home Entertainment (2010) (Argentina) (DVD)
- Sony Pictures Home Entertainment (2010) (Argentina) (DVD) (Blu-ray)
- Sony Pictures Home Entertainment (2010) (Belgium) (DVD)
- Sony Pictures Home Entertainment (2010) (Belgium) (DVD) (Blu-ray)
- Sony Pictures Home Entertainment (2009) (Canada) (DVD)
- Sony Pictures Home Entertainment (2010) (Germany) (DVD)
- Sony Pictures Home Entertainment (2010) (Germany) (DVD) (Blu-ray)
- Sony Pictures Home Entertainment (2009) (UK) (DVD)
- Sony Pictures Home Entertainment (2009) (UK) (DVD) (Blu-ray)
- Sony Pictures Home Entertainment (2010) (Netherlands) (DVD)
- Sony Pictures Home Entertainment (2010) (Netherlands) (DVD) (Blu-ray)
- Sony Pictures Home Entertainment (2009) (USA) (DVD)
- Sony Pictures Home Entertainment (2009) (USA) (DVD) (Blu-ray)
- Sony Pictures Releasing (2009) (South Korea) (all media)
- Svensk Filmindustri (SF) (2010) (Sweden) (DVD)
- Svensk Filmindustri (SF) (2010) (Sweden) (DVD) (Blu-ray)

## **eXistenZ (1999)**

### ***Production Companies***

- Alliance Atlantis Communications
- Canadian Television Fund
- Harold Greenberg Fund, The
- Movie Network, The (TMN)
- Natural Nylon Entertainment
- Serendipity Point Films
- Téléfilm Canada
- Union Générale Cinématographique (UGC)

### ***Distributors***

- Alliance Atlantis Communications
- Alliance Communications Corporation (Canada)
- Alliance Communications Corporation (UK)

- Ascot Elite Entertainment Group (Switzerland)
- Buena Vista Home Entertainment (Brazil) (TV)
- Columbia TriStar Egmont Film Distributors
- Dimension Films
- Dutch FilmWorks (DFW) (1999) (Netherlands) (VHS)
- Dutch FilmWorks (DFW) (2000) (Netherlands) (DVD)
- Echo Bridge Home Entertainment (2011) (USA) (DVD)
- GAGA Humax
- GAGA
- Gativideo (2000) (Argentina) (VHS)
- Kinowelt Filmverleih (Germany)
- Momentum Pictures (1999) (UK) (all media)
- Serendipity
- UGC-Fox Distribution (UFD) (France)
- Vitória Filmes (Portugal)

## **Le voyage dans la lune (A Trip to the Moon) (1902)**

### ***Production Companies***

- Star-Film

### ***Distributors***

- Star-Film (1902) (France) (theatrical)
- American Mutoscope & Biograph (1902) (USA) (theatrical)
- Edison Manufacturing Company (1902) (USA) (theatrical)
- S. Lubin (1902) (USA) (theatrical)
- Kleine Optical Company (1905) (USA) (theatrical)
- Facets Multimedia Distribution (2002) (USA) (DVD)
- Divisa Home Video (2005) (Spain) (DVD)
- Flicker Alley (2012) (USA) (theatrical)
- MK2 Diffusion (2011) (France) (theatrical) (re-release)
- Niels Le Tort (1902) (Sweden) (theatrical)
- Flicker Alley (2012) (USA) (DVD)
- Flicker Alley (2012) (USA) (DVD) (Blu-ray)
- Grapevine Video (????) (USA) (video)
- Image Entertainment (????) (USA) (DVD)
- Image Entertainment (????) (USA) (video) (laserdisc)
- Kino Video (????) (USA) (DVD)
- Kino Video (????) (USA) (VHS)
- LS Video (????) (USA) (video)
- StudioCanal (2012) (Germany) (DVD)
- Unknown Video (????) (USA) (VHS)

- **Flash Gordon (1936)**

- ***Production Companies***

- King Features Production
- Universal Pictures

- ***Distributors***

- Universal Pictures (1936) (USA) (theatrical)
- Questar Home Video (1991) (USA) (VHS)
- Image Entertainment (1992) (USA) (video) (laserdisc)
- Image Entertainment (1996) (USA) (video) (laserdisc)
- Image Entertainment (2000) (USA) (DVD)
- Image Entertainment (2002) (USA) (DVD)
- Bach Films (2009) (France) (DVD)
- Bridgestone Media (????) (USA) (VHS)
- Hearst Entertainment (2007) (USA) (DVD)
- Image Entertainment (2007) (USA) (DVD)
- Prism Entertainment Corporation (????) (USA) (VHS) (as "Flash Gordon: Rocketship")
- Stokey Video (????) (USA) (VHS)
- United American Video (1987) (USA) (VHS)
- Video Yesteryear (????) (USA) (video) (as "Flash Gordon: Rocketship")
- Western Trails Video (????) (USA) (VHS)

- **Idiocracy (2006)**

- ***Production Companies***

- Twentieth Century Fox Film Corporation (presents) (as Twentieth Century Fox) (A Mike Judge Film)
- Ternion Pictures (as A Ternion Production)

- ***Distributors***

- Twentieth Century Fox Film Corporation (2006) (USA) (theatrical) (released by) (A News Corporation Company)
- 20th Century Fox of Germany (2007) (Germany) (theatrical)
- 20th Century Fox Home Entertainment Japan (2008) (Japan) (DVD)
- 20th Century Fox de Argentina (2007) (Argentina) (all media)
- FS Film Oy (2007) (Finland) (DVD)
- Gativideo (2007) (Argentina) (DVD)
- Gativideo (2007) (Argentina) (VHS)
- Twentieth Century Fox Home Entertainment Germany (2007) (Germany) (DVD)
- Twentieth Century Fox Home Entertainment (2007) (Netherlands) (DVD)

## **Journey to the Center of Time (1967)**

### ***Production Companies***

- Borealis Enterprises
- Dorad Corporation

### ***Distributors***

- American General Pictures (1967) (USA) (theatrical)
- Genesis Home Video (1988) (USA) (VHS)
- Timeless Video (1994) (USA) (video)
- Englewood Entertainment (1999) (USA) (VHS)
- Madacy Entertainment (1999) (USA) (DVD)
- Madacy Entertainment (2000) (USA) (DVD)
- Brentwood Home Video (2003) (USA) (DVD)
- Academy Entertainment (video)
- American Video (video as "Time Warp")

## **[Matrix Trilogy (1999, 2003)]**

### **The Matrix (1999)**

### ***Production Companies***

- Warner Bros. Pictures
- Warner Bros. Pictures (presents)
- Village Roadshow Pictures (in association with)
- Groucho II Film Partnership (in association with)
- Silver Pictures (production)

### ***Distributors***

- Warner Bros. Pictures (1999) (USA) (theatrical)
- Roadshow Entertainment (1999) (Australia) (theatrical)
- Sandrew Metronome Distribution (1999) (Finland) (theatrical) (VHS) (DVD)
- Warner Bros. Entertainment (1999) (Canada) (theatrical)
- Warner Bros. (1999) (Argentina) (theatrical)
- Warner Bros. (1999) (Brazil) (theatrical)
- Warner Bros. (1999) (Czech Republic) (theatrical)
- Warner Bros. (1999) (Germany) (theatrical)
- Warner Bros. (1999) (UK) (theatrical)

- Warner Bros. (1999) (Italy) (theatrical)
- Warner Bros. (1999) (Japan) (theatrical)
- Warner Bros. (1999) (Netherlands) (theatrical)
- Warner Bros. (1999) (Sweden) (theatrical)
- Warner Sogefilms S.A. (1999) (Spain) (theatrical)
- Argentina Video Home (1999) (Argentina) (DVD)
- Argentina Video Home (1999) (Argentina) (VHS)
- Argentina Video Home (2009) (Argentina) (DVD) (Blu-ray)
- Fox Network (2002) (USA) (TV) (broadcast premiere)
- Mainostelevisio (MTV3) (2003) (2005) (2008) (2009) (Finland) (TV)
- Roadshow Entertainment Video (1999) (Australia) (VHS)
- SBS6 (2002) (Netherlands) (TV) (first national airing)
- Sandrew Metronome Distribution (2004) (Finland) (DVD) (10-disc Ultimate Matrix Collection)
- Sandrews (1999) (Sweden) (DVD)
- Sandrews (1999) (Sweden) (VHS)
- SubTV (2002) (2007) (Finland) (TV)
- Varus Video (Russia) (VHS)
- Warner Bros. Entertainment Finland Oy (2006) (Finland) (DVD) (3-disc Matrix Collection)
- Warner Home Video (2009) (Belgium) (DVD) (Blu-ray) (10th anniversary edition)
- Warner Home Video (2008) (Canada) (DVD) (4 film collection)
- Warner Home Video (1999) (Germany) (DVD)
- Warner Home Video (1999) (UK) (DVD)
- Warner Home Video (2008) (UK) (DVD)
- Warner Home Video (2000) (Netherlands) (DVD) (VHS)
- Warner Home Video (2008) (Netherlands) (DVD) (Blu-ray)
- Warner Home Video (2007) (Sweden) (DVD) (HD DVD)
- Warner Home Video (2008) (Sweden) (DVD) (Blu-ray)
- Warner Home Video (2007) (USA) (DVD) (Blu-ray)
- Warner Home Video (2007) (USA) (DVD) (HD DVD)
- Warner Home Video (2008) (USA) (DVD) (4 film collection)
- Warner Home Video (2008) (USA) (DVD) (Blu-ray)
- Warner Home Video (2009) (USA) (DVD) (Blu-ray) (10th anniversary edition)
- Warner Home Video (2010) (USA) (DVD) (Blu-ray)
- Warner Home Video (Brazil) (DVD)

## **The Matrix Reloaded (2003)**

### ***Production Companies***

- Warner Bros. Pictures
- Village Roadshow Pictures
- Silver Pictures



- NPV Entertainment
- Heineken Branded Entertainment

### ***Distributors***

- Warner Bros. Pictures (2003) (USA) (theatrical)
- Cinergia (2003) (Ukraine) (theatrical)
- Continental Film (2003) (Slovakia) (theatrical)
- Fox-Warner (2003) (Switzerland) (theatrical)
- Garsu Pasaulio Irasai (2003) (Lithuania) (theatrical)
- IMAX (2003) (Canada) (theatrical)
- Karo Premiere (2003) (Russia) (theatrical)
- Sandrew Metronome Distribution Sverige AB (2003) (Sweden) (theatrical)
- Sandrew Metronome Distribution (2003) (Finland) (theatrical) (VHS) (DVD)
- Warner Bros. Entertainment (2003) (Canada) (theatrical)
- Warner Bros. (2003) (Argentina) (theatrical)
- Warner Bros. (2003) (Brazil) (theatrical)
- Warner Bros. (2003) (Czech Republic) (theatrical)
- Warner Bros. (2003) (Germany) (theatrical)
- Warner Bros. (2003) (France) (theatrical)
- Warner Bros. (2003) (UK) (theatrical)
- Warner Bros. (2003) (Italy) (theatrical)
- Warner Bros. (2003) (Japan) (theatrical)
- Warner Bros. (2003) (Netherlands) (theatrical)
- Warner Bros. (2003) (Sweden) (theatrical)
- Argentina Video Home (2004) (Argentina) (DVD)
- Argentina Video Home (2004) (Argentina) (VHS)
- Argentina Video Home (2009) (Argentina) (DVD) (Blu-ray)
- Mainostelevisio (MTV3) (2008) (2009) (Finland) (TV)
- SBS6 (2006) (Netherlands) (TV) (first national airing)
- Sandrew Metronome Distribution (2004) (Finland) (DVD) (10-disc Ultimate Matrix Collection)
- Sandrews (2003) (Sweden) (DVD)
- SubTV (2007) (Finland) (TV)
- Warner Bros. Entertainment Finland Oy (2006) (Finland) (DVD) (3-disc Matrix Collection)
- Warner Home Video (2006) (Germany) (DVD)
- Warner Home Video (2003) (Netherlands) (DVD) (VHS)
- Warner Home Video (2008) (Netherlands) (DVD) (Blu-ray)
- Warner Home Video (2007) (Sweden) (DVD) (HD DVD)
- Warner Home Video (2008) (Sweden) (DVD) (Blu-ray)
- Warner Home Video (2003) (USA) (DVD)
- Warner Home Video (2007) (USA) (DVD) (Blu-ray)
- Warner Home Video (2007) (USA) (DVD) (HD DVD)
- Warner Home Video (2010) (USA) (DVD) (Blu-ray)

- Warner Home Vídeo (Brazil) (DVD)
- Warner Home Vídeo (Brazil) (VHS)

## **The Matrix Revolutions (2003)**

### ***Production Companies***

- Warner Bros. Pictures
- Village Roadshow Pictures
- NPV Entertainment
- Silver Pictures

### ***Distributors***

- Warner Bros. Pictures (2003) (USA) (theatrical)
- Cinergia (2003) (Ukraine) (theatrical)
- Fox-Warner (2003) (Switzerland) (theatrical)
- IMAX (2003) (Canada) (theatrical)
- Karo Premiere (2003) (Russia) (theatrical)
- Warner Bros. (2003) (Argentina) (theatrical)
- Warner Bros. (2003) (Brazil) (theatrical)
- Warner Bros. (2003) (Germany) (theatrical)
- Warner Bros. (2003) (France) (theatrical)
- Warner Bros. (2003) (Italy) (theatrical)
- Warner Bros. (2003) (Japan) (theatrical)
- Warner Bros. (2003) (Netherlands) (theatrical)
- Warner Sogefilms S.A. (2003) (Spain) (theatrical)
- Continental Film (2003) (Slovakia) (theatrical)
- Sandrew Metronome Distribution Sverige AB (2003) (Sweden) (theatrical)
- Sandrew Metronome Distribution (2003) (Finland) (theatrical)
- Warner Bros. Entertainment (2003) (Canada) (theatrical)
- Warner Bros. (2003) (Czech Republic) (theatrical)
- Warner Bros. (2003) (Sweden) (theatrical)
- Argentina Video Home (Argentina) (DVD)
- Argentina Video Home (Argentina) (VHS)
- ION Television (2009) (USA) (TV)
- Mainostelevisio (MTV3) (2008) (2009) (Finland) (TV)
- Sandrew Metronome Distribution (2004) (Finland) (DVD) (10-disc Ultimate Matrix Collection)
- Sandrew Metronome Distribution (2004) (Finland) (VHS) (DVD)
- SubTV (2007) (Finland) (TV)
- Veronica (2007) (Netherlands) (TV) (first national airing)
- Warner Bros. Entertainment Finland Oy (2006) (Finland) (DVD) (3-disc Matrix Collection)

- Warner Home Video (2006) (Germany) (DVD)
- Warner Home Video (2004) (Netherlands) (DVD) (VHS)
- Warner Home Video (2008) (Netherlands) (DVD) (Blu-ray)
- Warner Home Video (2004) (Sweden) (DVD)
- Warner Home Video (2008) (Sweden) (DVD) (Blu-ray)
- Warner Home Video (2004) (USA) (DVD)
- Warner Home Video (2007) (USA) (DVD) (Blu-ray)
- Warner Home Video (2007) (USA) (DVD) (HD DVD)
- Warner Home Video (2004) (Brazil) (DVD)
- Warner Home Video (2004) (Brazil) (VHS)

## **Mechanical Monsters (1941)**

### ***Production Companies***

- Fleischer Studios

### ***Distributors***

- Paramount Pictures (1941) (USA) (theatrical)
- Warner Home Video (1987) (USA) (VHS)
- Grapevine Video (2000) (USA) (video)
- Image Entertainment (2000) (USA) (DVD)
- Media Home Entertainment (2000) (USA) (VHS)
- Passport International Entertainment (2000) (USA) (DVD)
- Reel Media International (2004) (worldwide) (video)
- Reel Media International (2007) (worldwide) (DVD)
- Warner Home Video (2006) (Canada) (DVD)
- Warner Home Video (2006) (USA) (DVD)

## **Metropolis (1927)**

### ***Production Companies***

- Universum Film (UFA)

### ***Distributors***

- Paramount-Ufa-Metro-Verleihbetriebe GmbH (Parufamet) (1927) (Germany) (theatrical)
- Universum Film (UFA) (1927) (Germany) (theatrical)
- Paramount Pictures (1928) (USA) (theatrical)
- Hollywood Home Theatre (1980) (USA) (VHS)

- Metropol-Filmverleih (1984) (West Germany) (theatrical) (re-release) (Moroder short version)
- GoodTimes Home Video (1985) (USA) (VHS)
- Vestron Video (1985) (West Germany) (VHS) (Moroder short version)
- Vestron Video (1985) (USA) (VHS) (1984 version)
- Vestron Video (1985) (USA) (video) (laserdisc)
- Lax Video S.A. (1986) (Spain) (VHS) (1984 version)
- Vestron Video International (1986) (Belgium) (video)
- Divisa Ediciones (1995) (Spain) (VHS)
- Navarre Entertainment (2002) (USA) (DVD)
- Divisa Home Video (2003) (Spain) (DVD)
- Eureka Entertainment (2003) (UK) (DVD)
- Kino International (2003) (USA) (DVD) (digitally restored version)
- Universum Film (UFA) (2003) (Germany) (DVD) (DeLuxe Edition)
- Delta Expedition (2004) (USA) (DVD)
- Kino Video (2004) (USA) (DVD) (on "Fritz Lang Epic Collection")
- Madman Entertainment (2004) (Australia) (DVD)
- Reel Media International (2004) (USA) (video)
- Reel Media International (2005) (USA) (TV)
- SBP (2005) (Argentina) (DVD)
- SBP (2005) (Argentina) (VHS) (re-release)
- Kinokuniya (2006) (Japan) (DVD)
- Kino Lorber Films (2011) (USA) (theatrical)
- Wardour Films (1927) (UK) (theatrical)
- Atlantic Film (2009) (Sweden) (DVD)
- Cable Video (????) (USA) (VHS)
- Continental Home Video (????) (Brazil) (VHS)
- Divisa Home Video (2010) (Spain) (DVD) (2010 new version)
- Forward (2007) (Japan) (DVD)
- Killiam Collection (????) (USA) (VHS)
- Kino Lorber Films (2011) (USA) (DVD)
- Kino Lorber (2010) (USA) (DVD) (Blu-Ray)
- Kino Video (2009) (USA) (DVD) (Blu-ray)
- Kino Video (????) (USA) (VHS)
- LS Video (????) (USA) (VHS)
- Living Colour Entertainment (2007) (Netherlands) (DVD) (two-disc special edition)
- Living Colour Entertainment (2010) (Netherlands) (DVD) (restored version) (two-disc special edition)
- MK2 Éditions (2004) (France) (DVD)
- Reel Media International (2007) (USA) (all media)
- Stokey Video (????) (USA) (VHS)
- Video Yesteryear (????) (USA) (VHS)
- Vivarto (2008) (Poland) (all media)

## **Minority Report (2002)**

### ***Production Companies***

- Twentieth Century Fox Film Corporation (presents) (as Twentieth Century Fox)
- DreamWorks SKG (presents) (as DreamWorks Pictures)
- Cruise/Wagner Productions (as Cruise/Wagner)
- Blue Tulip Productions
- Ronald Shusett/Gary Goldman
- Amblin Entertainment (uncredited)

### ***Distributors***

- Twentieth Century Fox Film Corporation (2002) (USA) (theatrical)
- 20th Century Fox Italia (2002) (Italy) (theatrical)
- 20th Century Fox Netherlands (2002) (Netherlands) (theatrical)
- 20th Century Fox (2003) (Japan) (theatrical) (Far East)
- 20th Century Fox (2002) (Sweden) (theatrical)
- 20th Century Fox de Argentina (2002) (Argentina) (theatrical)
- 20th Century Fox of Germany (2002) (Germany) (theatrical)
- Bontonfilm (2002) (Czech Republic) (theatrical)
- Centfox Film (2002) (Austria) (theatrical)
- FS Film Oy (2002) (Finland) (theatrical)
- Fox-Warner (2002) (Switzerland) (theatrical)
- Gemini Film (2002) (Russia) (theatrical)
- 20th Century Fox Home Entertainment (200?) (Brazil) (DVD)
- 20th Century Fox Home Entertainment (200?) (Brazil) (VHS)
- American Broadcasting Company (ABC) (2007) (USA) (TV)
- DreamWorks Home Entertainment (2002) (USA) (DVD) (widescreen)
- DreamWorks Home Entertainment (2003) (USA) (DVD) (widescreen)
- DreamWorks Home Entertainment (2006) (USA) (DVD)
- DreamWorks Home Entertainment (2010) (USA) (DVD) (Blu-ray)
- FS Film Oy (2003) (Finland) (DVD) (VHS)
- Gativideo (2003) (Argentina) (DVD)
- Gativideo (2003) (Argentina) (VHS)
- Mainostelevisio (MTV3) (2006) (2008) (2009) (Finland) (TV)
- SBS6 (2005) (Netherlands) (TV)
- SF Home Entertainment (2002) (Sweden) (DVD)
- SF Home Entertainment (2004) (Sweden) (DVD)
- SF Home Entertainment (2009) (Sweden) (DVD)
- SF Home Entertainment (2010) (Sweden) (DVD) (Blu-ray)
- Twentieth Century Fox Home Entertainment (2003) (Netherlands) (VHS)
- Twentieth Century Fox Home Entertainment (2010) (Netherlands) (DVD) (Blu-ray)
- Universal Home Entertainment (2002) (USA) (DVD) (special edition)

### **Star Trek (TV Series) (1966-69)**

### ***Production Companies***

- Desilu Productions (1966-1967)
- Norway Corporation
- Paramount Television (1968-1969)

### ***Distributors***

- National Broadcasting Company (NBC) (1966-1969) (USA) (TV) (original airing)
- British Broadcasting Corporation (BBC) (1969-) (UK) (TV) (BBC 1)
- AXN (2009) (Hungary) (TV) (re-release) (on AXN Sci-Fi)
- CIC-Taft Home Video
- Paramount Home Entertainment (2004) (Germany) (DVD)
- Paramount Home Entertainment (2004) (Netherlands) (DVD)
- Paramount Home Entertainment (2009) (Netherlands) (DVD) (Blu-ray) (seasons 1 and 2)
- Paramount Home Entertainment (2009) (Netherlands) (DVD) (seasons 1 and 2)
- Paramount Home Entertainment (2010) (Netherlands) (DVD) (Blu-ray) (season 3)
- Paramount Home Entertainment (2010) (Netherlands) (DVD) (season 3)
- Paramount Home Entertainment (2009) (USA) (DVD) (Blu-ray) (seasons 1-3)
- Paramount Home Video (1987) (USA) (VHS)
- Paramount Home Video (1987) (USA) (video) (laserdisc)
- Paramount Home Video (2004) (USA) (DVD)
- Sat.1 (1987-1988) (West Germany) (TV)
- Sci-Fi Channel, The (????) (UK) (TV)
- TV6 (2009) (Hungary) (TV) (re-release)
- Zweites Deutsches Fernsehen (ZDF) (1972-1974) (West Germany) (TV)

### **[Star Wars (Series) (1977-2005)]**

#### **Star Wars (1977)**

### ***Production Companies***

- Lucasfilm (as A Lucasfilm Limited Production)
- Twentieth Century Fox Film Corporation

### ***Distributors***

- Twentieth Century Fox Film Corporation (1977) (USA) (theatrical) (as 20th Century Fox)
- 20th Century Fox (1977) (France) (theatrical)
- 20th Century Fox (1977) (Canada) (theatrical)

- 20th Century Fox (1977) (UK) (theatrical)
- 20th Century Fox (1978) (Japan) (theatrical)
- 20th Century Fox de Argentina (1977) (Argentina) (theatrical)
- 20th Century Fox de Argentina (1997) (Argentina) (theatrical) (special edition)
- 20th Century Fox of Germany (1978) (West Germany) (theatrical)
- Finnkino (1997) (Finland) (theatrical) (special edition)
- Fox Films (1977) (Finland) (theatrical)
- Hispano Foxfilms S.A.E. (1997) (Spain) (theatrical) (special edition)
- In-Cine Distribuidora Cinematográfica S.A. (1977) (Spain) (theatrical)
- UGC-Fox Distribution (UFD) (1997) (France) (theatrical) (special edition)
- 20th Century Fox Television Distribution (1997-) (USA) (TV)
- Abril Vídeo (Brazil) (VHS)
- Alexandra Video Club (2004) (Bulgaria) (DVD)
- CBS/Fox Home Video (1980) (Australia) (VHS) (original video release)
- CBS/Fox Video (1984) (Belgium) (VHS)
- CBS/Fox (198?) (Argentina) (VHS)
- CBS/Fox (198?) (USA) (VHS)
- Columbia Broadcasting System (CBS) (1984) (USA) (TV) (original airing)
- Egmont Entertainment (2000) (Finland) (VHS)
- FS Film Oy (2004) (Finland) (DVD)
- Finnkino (1995) (Finland) (VHS)
- Fox Video (199?) (USA) (video) (laserdisc)
- Gativideo (1997) (Argentina) (VHS) (special edition)
- Rautakirja (1983) (Finland) (VHS) (rental)
- Showtime (1994) (Finland) (VHS)
- Twentieth Century Fox Home Entertainment (19??) (Netherlands) (VHS)
- Twentieth Century Fox Home Entertainment (2005) (Netherlands) (DVD) (special edition)
- Twentieth Century Fox Home Entertainment (2011) (Netherlands) (DVD) (Blu-ray) (The Complete Saga)

## **Star Wars: Episode V – The Empire Strikes Back (1980)**

### ***Production Companies***

- Lucasfilm (as A Lucasfilm Limited Production)

### ***Distributors***

- Twentieth Century Fox Film Corporation (1980) (USA) (theatrical) (as A Twentieth Century-Fox Release)
- 20th Century Fox (1980) (UK) (theatrical)
- 20th Century Fox (1980) (Japan) (theatrical)
- 20th Century Fox de Argentina (1980) (Argentina) (theatrical)



- Hoyts Distribution (1980) (Australia) (theatrical)
- Twentieth Century Fox Film Corporation (1981) (USA) (theatrical) (re-release)
- National Broadcasting Company (NBC) (1987) (USA) (TV) (pan/scan)
- 20th Century Fox (1980) (Canada) (theatrical)
- 20th Century Fox de Argentina (1997) (Argentina) (theatrical) (special edition)
- Finnkino (1997) (Finland) (theatrical)
- 20th Century Fox Home Entertainment Japan (2006) (Japan) (DVD)
- 20th Century Fox Home Entertainment (2004) (UK) (DVD)
- 20th Century Fox of Germany (Germany)
- Abril Vídeo (Brazil) (VHS)
- CBS/Fox Home Video (1980s) (Australia) (VHS) (pan/scan)
- CBS/Fox Video (1984) (Belgium) (VHS) (pan/scan)
- CBS/Fox (1980s) (Argentina) (VHS)
- CBS/Fox (1980s) (USA) (VHS) (pan/scan)
- CBS/Fox (USA) (laserdisc)
- Egmont Entertainment (2000) (Finland) (VHS)
- FS Film Oy (2004) (Finland) (DVD)
- Finnkino (1995) (Finland) (VHS)
- Fox Video (1990s) (Australia) (VHS)
- Fox Video (????) (USA) (VHS) (pan/scan)
- Gativideo (2005) (Argentina) (DVD) (special edition)
- Gativideo (2005) (Argentina) (VHS) (special edition)
- Showtime (1985) (Finland) (VHS) (rental)
- Twentieth Century Fox Home Entertainment (2005) (Netherlands) (DVD) (special edition)
- Twentieth Century Fox Home Entertainment (2011) (Netherlands) (DVD) (Blu-ray) (The Complete Saga)
- Twentieth Century Fox Home Entertainment (????) (Netherlands) (VHS) (pan/scan)
- UGC-Fox Distribution (UFD) (France)

## **Star Wars: Episode VI – Revenge of the Jedi (1983)**

### ***Production Companies***

- Lucasfilm (as A Lucasfilm Limited Production)

### ***Distributors***

- Twentieth Century Fox Film Corporation (1983) (USA) (theatrical) (as A Twentieth Century-Fox release)
- 20th Century Fox (1983) (UK) (theatrical)
- 20th Century Fox de Argentina (1983) (Argentina) (theatrical)
- CBS/Fox Video (1985) (Belgium) (video)
- Showtime (1986) (Finland) (VHS) (rental)

- CBS/Fox Home Video (1987) (New Zealand) (VHS) (original video release)
- National Broadcasting Company (NBC) (1989) (USA) (TV) (broadcast premiere)
- Showtime (1995) (Finland) (VHS)
- 20th Century Fox de Argentina (1997) (Argentina) (theatrical) (special edition)
- Finnkino (1997) (Finland) (theatrical) (special edition)
- Twentieth Century Fox Film Corporation (1997) (USA) (theatrical) (reissue)
- Gativideo (1997) (Argentina) (VHS) (special edition)
- Egmont Entertainment (2000) (Finland) (VHS) (special edition)
- 20th Century Fox Home Entertainment España S.A. (2004) (Spain) (DVD)
- 20th Century Fox Home Entertainment (2004) (UK) (DVD)
- FS Film Oy (2004) (Finland) (DVD)
- Twentieth Century Fox Home Entertainment (2005) (Netherlands) (DVD) (special edition)
- 20th Century Fox Television Distribution (2006) (USA) (TV)
- 20th Century Fox (1983) (Canada) (theatrical)
- 20th Century Fox (1983) (Japan) (theatrical)
- 20th Century Fox of Germany (Germany)
- Abril Vídeo (Brazil) (VHS)
- CBS/Fox (198?) (Argentina) (VHS)
- Finnkino (1997) (Finland) (VHS) (special edition)
- Twentieth Century Fox Home Entertainment (19??) (Netherlands) (VHS)
- Twentieth Century Fox Home Entertainment (2011) (Netherlands) (DVD) (Blu-ray) (The Complete Saga)
- UGC-Fox Distribution (UFD) (1997) (France)

## **Star Wars: Episode I – The Phantom Menace (1999)**

### ***Production Companies***

- Lucasfilm

### ***Distributors***

- Twentieth Century Fox Film Corporation (1999) (USA) (theatrical)
- 20th Century Fox Italia (1999) (Italy) (theatrical)
- 20th Century Fox Netherlands (1999) (Netherlands) (theatrical)
- 20th Century Fox Netherlands (2012) (Netherlands) (theatrical) (3D re-release)
- 20th Century Fox (1999) (UK) (theatrical)
- 20th Century Fox (1999) (Japan) (theatrical)
- 20th Century Fox (2012) (Japan) (theatrical) (3D re-release)
- 20th Century Fox (2012) (Singapore) (theatrical) (3D re-release)
- 20th Century Fox de Argentina (1999) (Argentina) (theatrical)
- 20th Century Fox of Germany (1999) (Germany) (theatrical)
- Big Picture 2 Films (2012) (Portugal) (theatrical)

- Finnkino (1999) (Finland) (theatrical)
  - Fox-Warner (1999) (Switzerland) (theatrical)
  - Gemini Film (1999) (Russia) (theatrical)
  - Hispano Foxfilms S.A.E. (1999) (Spain) (theatrical)
  - Odeon (1999) (Greece) (theatrical)
  - Odeon (2012) (Greece) (theatrical) (3D re-release)
  - UGC-Fox Distribution (UFD) (1999) (France) (theatrical)
  - 20th Century Fox Home Entertainment (USA) (DVD)
  - 20th Century Fox Home Entertainment (USA) (laserdisc)
  - Egmont Entertainment (2000) (Finland) (VHS)
  - FS Film Oy (2001) (Finland) (DVD)
  - Fox Network (2001) (USA) (TV)
  - Gativideo (2000) (Argentina) (VHS)
  - Gativideo (2001) (Argentina) (DVD)
  - Gativideo (2005) (Argentina) (DVD) (special edition)
  - Odeon (2000) (Greece) (DVD)
  - Odeon (2011) (Greece) (DVD) (Blu-ray)
  - Twentieth Century Fox Home Entertainment Germany (2000) (Germany) (VHS)
  - Twentieth Century Fox Home Entertainment (2000) (Netherlands) (VHS)
  - Twentieth Century Fox Home Entertainment (2001) (Netherlands) (DVD)
  - Twentieth Century Fox Home Entertainment (2005) (Netherlands) (DVD) (special edition)
  - Twentieth Century Fox Home Entertainment (2011) (Netherlands) (DVD) (Blu-ray) (The Complete Saga)
  - Yorin (2002) (Netherlands) (TV)
- 
- **Star Wars: Episode II – Attack of the Clones (2002)**

### ***Production Companies***

- Lucasfilm

### ***Distributors***

- Twentieth Century Fox Film Corporation (2002) (USA) (theatrical)
- 20th Century Fox Italia (2002) (Italy) (theatrical)
- 20th Century Fox Netherlands (2002) (Netherlands) (theatrical)
- 20th Century Fox Norway (2002) (Norway) (theatrical)
- 20th Century Fox (2002) (Canada) (theatrical)
- 20th Century Fox (2002) (UK) (theatrical)
- 20th Century Fox (2002) (Mexico) (theatrical)
- 20th Century Fox de Argentina (2002) (Argentina) (theatrical)
- 20th Century Fox of Germany (2002) (Germany) (theatrical)
- Bandur Film (2002) (Federal Republic of Yugoslavia) (theatrical)

- FS Film Oy (2002) (Finland) (theatrical)
- Fox Filmes do Brasil (2002) (Brazil) (theatrical)
- Fox-Warner (2002) (Switzerland) (theatrical)
- Gemini Film (2002) (Russia) (theatrical)
- Hispano Foxfilms S.A.E. (2002) (Spain) (theatrical)
- IMAX (2002) (worldwide) (theatrical) (IMAX version)
- Odeon (2002) (Greece) (theatrical)
- UGC-Fox Distribution (UFD) (2002) (France) (theatrical)
- 20th Century Fox Home Entertainment Japan (2002) (Japan) (VHS)
- 20th Century Fox Home Entertainment (200?) (Brazil) (DVD)
- 20th Century Fox Home Entertainment (200?) (Brazil) (VHS)
- 20th Century Fox Home Entertainment (2005) (USA) (DVD)
- Fox Network (2005) (USA) (TV)
- Gativideo (2002) (Argentina) (DVD)
- Gativideo (2002) (Argentina) (VHS)
- Odeon (2002) (Greece) (DVD)
- Odeon (2011) (Greece) (DVD) (Blu-ray)
- Twentieth Century Fox Home Entertainment (2002) (Netherlands) (DVD) (VHS)
- Twentieth Century Fox Home Entertainment (2005) (Netherlands) (DVD) (special edition)
- Twentieth Century Fox Home Entertainment (2011) (Netherlands) (DVD) (Blu-ray) (The Complete Saga)
- Yoron (2005) (Netherlands) (TV)

## **Star Wars: Episode III – Revenge of the Sith (2005)**

### ***Production Companies***

- Lucasfilm

### ***Distributors***

- Twentieth Century Fox Film Corporation (2005) (USA) (theatrical)
- 20th Century Fox Italia (2005) (Italy) (theatrical)
- 20th Century Fox Netherlands (2005) (Netherlands) (theatrical)
- 20th Century Fox Norway (2005) (Norway) (theatrical)
- 20th Century Fox (2005) (France) (theatrical)
- 20th Century Fox (2005) (UK) (theatrical)
- 20th Century Fox (2005) (Japan) (theatrical)
- 20th Century Fox (2005) (Singapore) (theatrical)
- 20th Century Fox de Argentina (2005) (Argentina) (theatrical)
- 20th Century Fox of Germany (2005) (Germany) (theatrical)
- Bontonfilm (2005) (Czech Republic) (theatrical)
- FS Film Oy (2005) (Finland) (theatrical)

- Fox-Warner (2005) (Switzerland) (theatrical)
- Gemini Film (2005) (Russia) (theatrical)
- Svensk Filmindustri (SF) (2005) (Sweden) (theatrical)
- 20th Century Fox Home Entertainment (2005) (Brazil) (DVD)
- 20th Century Fox Home Entertainment (2005) (Brazil) (VHS)
- 20th Century Fox Home Entertainment (2005) (USA) (DVD)
- 20th Century Fox (2005) (Canada) (all media)
- Gativideo (2005) (Argentina) (DVD)
- Gativideo (2005) (Argentina) (VHS)
- RTL Entertainment (2009) (Netherlands) (TV) (RTL5) (first national airing)
- Twentieth Century Fox Home Entertainment (2005) (Netherlands) (DVD) (special edition)
- Twentieth Century Fox Home Entertainment (2011) (Netherlands) (DVD) (Blu-ray) (The Complete Saga)

## **[Terminator Series (1984-2009)]**

### **Terminator (1984)**

#### ***Production Companies***

- Hemdale Film
- Pacific Western
- Euro Film Funding
- Cinema 84 (as Cinema '84, A Greenberg Brothers Partnership)

#### ***Distributors***

- Orion Pictures Corporation (1984) (USA) (theatrical)
- 20th Century Fox (1985) (France) (theatrical)
- Filmverlag der Autoren (1985) (Germany) (theatrical)
- J. Arthur Rank Film Distributors (1985) (UK) (theatrical)
- Kinosto (1985) (Finland) (theatrical)
- Monopole-Pathé (1985) (Switzerland) (theatrical)
- Svensk Filmindustri (SF) (1985) (Sweden) (theatrical)
- Hemdale Home Video (1985) (USA) (video) (laserdisc)
- Thorn EMI Video (1985) (USA) (VHS)
- National Broadcasting Company (NBC) (1987) (USA) (TV)
- Hemdale Home Video (1991) (USA) (VHS) (pan and scan)
- Image Entertainment (1991) (USA) (video) (laserdisc)
- Oy Europa Vision AB (1991) (Finland) (VHS)
- TV3 (1991) (Finland) (TV)
- Alliance Home Video (1995) (USA) (video)

- Artisan Entertainment (1995) (USA) (VHS)
- Image Entertainment (1995) (USA) (video) (laserdisc)
- Home Box Office Home Video (HBO) (1988) (USA) (VHS)
- TF1 Vidéo (1996) (France) (video) (laserdisc)
- Warner Home Video (1996) (Finland) (VHS)
- Image Entertainment (1997) (USA) (DVD) (widescreen)
- VCL Communications (1998) (Germany) (DVD)
- Cecchi Gori Home Video (2001) (Italy) (DVD)
- FS Film Oy (2001) (Finland) (DVD) (special edition)
- MGM Home Entertainment (Europe) (2001) (UK) (DVD)
- MGM Home Entertainment (2001) (Germany) (DVD)
- MGM Home Entertainment (2001) (USA) (DVD)
- Svensk Filmindustri (SF) (2001) (Sweden) (DVD)
- MGM Home Entertainment (2004) (Germany) (DVD)
- FS Film Oy (2005) (Finland) (DVD) (ultimate edition)
- MGM Home Entertainment (Europe) (2005) (UK) (DVD)
- Sony Pictures Home Entertainment (2005) (Netherlands) (DVD)
- MGM Home Entertainment (2006) (Germany) (DVD)
- MGM Home Entertainment (2006) (USA) (DVD) (widescreen)
- Sony Pictures Home Entertainment (2006) (USA) (DVD)
- Sony Pictures Home Entertainment (2006) (USA) (DVD) (Blu-ray)
- 20th Century Fox Home Entertainment (2007) (USA) (DVD) (The Definitive Edition)
- MGM Home Entertainment (2007) (USA) (DVD)
- 20th Century Fox Home Entertainment (2009) (USA) (DVD) (Blu-ray Disc)
- Home Box Office Home Video (HBO) (1980s) (USA) (VHS) (for Weintraub Entertainment)
- Orion Home Video (19??) (USA) (VHS)
- RCV Home Entertainment (199?) (Netherlands) (VHS)
- Roadshow Home Video (19??) (Australia) (VHS)
- Thorn EMI (19??) (UK) (VHS)
- Weintraub Entertainment Group (1980s) (USA) (video)

## **Terminator 2: Judgment Day (1991)**

### ***Production Companies***

- Carolco Pictures
- Pacific Western (as a Pacific Western production)
- Lightstorm Entertainment (in association with)
- Canal+ (presented in association with) (as Le Studio Canal+ S.A.)
- T2 Productions (uncredited)

## ***Distributors***

- TriStar Pictures (1991) (USA) (theatrical)
- Canal+ Droits Audiovisuels (1991) (France) (theatrical)
- Columbia TriStar Films AB (1991) (Sweden) (theatrical)
- Columbia TriStar Films (1991) (France) (theatrical)
- Columbia TriStar Films de Argentina (1991) (Argentina) (theatrical)
- Columbia TriStar Films de España (1991) (Spain) (theatrical)
- Finnkino (1991) (Finland) (theatrical)
- Future Film (2003) (Finland) (theatrical) (35 mm & 70 mm)
- Guild Film Distribution (1991) (UK) (theatrical)
- Penta Film (1991) (Italy) (theatrical)
- Svenska Filminstitutet (SFI) (1991) (Sweden) (theatrical)
- Toho-Towa (1991) (Japan) (theatrical)
- American Broadcasting Company (ABC) (1994) (USA) (TV) (broadcast premiere)
- Artisan Entertainment (1997) (USA) (DVD) (widescreen)
- Artisan Entertainment (2000) (USA) (DVD) (widescreen)
- Artisan Entertainment (2004) (USA) (DVD)
- Artisan Entertainment (USA) (VHS)
- Atlantic Film (2003) (Sweden) (DVD) (director's cut)
- Atlantic Film (2004) (Sweden) (DVD)
- Atlantic Film (2004) (Sweden) (DVD) (director's cut)
- Columbia Home Video (Brazil) (DVD)
- Columbia TriStar Home Video (1996) (Philippines) (VHS)
- Flashstar Home Vídeo (Brazil) (VHS)
- Future Film (2003) (2004) (2008) (Finland) (DVD) (special edition) (director's cut) (ultimate edition)
- Future Film (2008) (Sweden) (DVD) (director's cut)
- Gativideo (2006) (Argentina) (DVD)
- IPA Asia Pacific (2009) (Thailand) (DVD)
- IPA Asia Pacific (2012) (Vietnam) (DVD)
- LK-TEL Vídeo (Brazil) (VHS)
- LK-TEL (1992) (Argentina) (VHS)
- Lions Gate Films (2003) (North America) (all media)
- Live Home Video (1998) (USA) (video) (laserdisc)
- Live Home Video (USA) (DVD)
- Live Home Video (USA) (VHS)
- Maple Pictures (2007) (Canada) (DVD)
- Momentum Pictures Home Entertainment (2001) (UK) (DVD)
- Momentum Pictures Home Entertainment (2002) (UK) (DVD) (director's cut)
- Momentum Pictures Home Entertainment (2007) (UK) (DVD) (HD-DVD)
- Nelonen (1997) (Finland) (TV)
- Nordisk Film (2000) (Denmark) (DVD)
- Nordisk Film (2000) (Sweden) (DVD)
- Optimum Home Entertainment (2008) (UK) (DVD) (Blu-ray) (director's cut)



- Oy Europa Vision AB (1992) (Finland) (VHS)
- Pioneer Entertainment (1991) (USA) (video) (laserdisc)
- Pioneer Entertainment (1993) (USA) (video) (laserdisc)
- Pioneer (1992) (Germany) (video) (laserdisc)
- Pioneer (1993) (UK) (video) (laserdisc)
- Pioneer (1996) (UK) (video) (laserdisc)
- Pioneer (1992) (Japan) (video) (laserdisc)
- RCA/Columbia Pictures Home Video (1991) (Australia) (VHS)
- RCV Home Entertainment (2003) (Netherlands) (DVD)
- Twentieth Century Fox Home Entertainment (1994) (Netherlands) (VHS)
- Universal Pictures Benelux (2008) (Netherlands) (DVD)
- Universal Pictures Benelux (2008) (Netherlands) (DVD) (Blu-ray) (director's cut)
- Universal Pictures Finland Oy (2009) (Finland) (DVD) (Blu-ray)
- VCL Communications (199?) (Germany) (VHS)
- Video Film Express (199?) (Netherlands) (VHS)
- Yleisradio (YLE) (1996) (Finland) (TV)

### **Terminator 3: Rise of the Machines (2003)**

#### ***Production Companies***

- C-2 Pictures
- Intermedia Films
- IMF Internationale Medien und Film GmbH & Co. 3. Produktions KG (as IMF)
- Mostow/Lieberman Productions

#### ***Distributors***

- Warner Bros. Pictures (2003) (USA) (theatrical)
- Buena Vista International (2003) (Switzerland) (theatrical)
- Cascade Film (2003) (Russia) (theatrical)
- Columbia TriStar Film Distributors (2003) (UK) (theatrical)
- Columbia TriStar Film (2003) (Germany) (theatrical)
- Columbia TriStar Films AB (2003) (Sweden) (theatrical)
- Columbia TriStar Films (2003) (France) (theatrical)
- Columbia TriStar Films (2003) (Netherlands) (theatrical)
- Columbia TriStar Films de Argentina (2003) (Argentina) (theatrical)
- Columbia TriStar Italia (2003) (Italy) (theatrical)
- Columbia TriStar Nordisk Film Distributors (2003) (Finland) (theatrical)
- EDKO Film (2003) (Hong Kong) (theatrical)
- InterCom (2003) (Hungary) (theatrical)
- Sony Pictures Entertainment (SPE) (2003) (Croatia) (theatrical)
- Sony Pictures Entertainment (SPE) (2003) (Korea) (theatrical)
- Sony Pictures Entertainment (SPE) (2003) (Romania) (theatrical)

- Toho-Towa (2003) (Japan) (theatrical)
- Warner Bros. Entertainment (2003) (Canada) (theatrical)
- Columbia TriStar Home Entertainment (200?) (Brazil) (DVD)
- Columbia TriStar Home Entertainment (200?) (Brazil) (VHS)
- Columbia TriStar Home Entertainment (2003) (Germany) (DVD)
- Columbia TriStar Home Entertainment (2003) (Netherlands) (DVD)
- Columbia TriStar Home Video (2003) (UK) (DVD)
- Columbia TriStar Home Video (2003) (Netherlands) (VHS)
- FX Network (2007) (USA) (TV)
- LK-TEL (Argentina) (DVD)
- LK-TEL (Argentina) (VHS)
- Nelonen (2006) (Finland) (TV)
- RTL Entertainment (2006) (Netherlands) (TV) (first national airing) (RTL5)
- Sony Pictures Home Entertainment (2006) (Netherlands) (DVD)
- Sony Pictures Home Entertainment (2009) (Netherlands) (DVD) (Blu-Ray Disc)
- Universal Pictures Finland Oy (2003) (Finland) (DVD) (VHS)
- Universal Pictures Nordic (2003) (Sweden) (DVD)
- Warner Home Video (2003) (Canada) (DVD)
- Warner Home Video (2003) (USA) (DVD)
- Warner Home Video (2004) (USA) (DVD) (widescreen)
- Warner Home Video (2005) (USA) (DVD)
- Warner Home Video (2006) (USA) (DVD) (HD-DVD)
- Warner Home Video (2008) (USA) (DVD) (Blu-ray)

## **Terminator: The Sarah Conner Chronicles (2008)**

### ***Production Companies***

- Bartleby Company
- C-2 Pictures
- Warner Bros. Television
- Halcyon Company, The
- Sarah Connor Pictures
- Syfy

### ***Distributors***

- 20th Century Fox Television (2008-) (worldwide) (TV)
- Fox Network (2008-2009) (USA) (TV)
- A Channel (2008-) (Canada) (TV)
- AXN (2008-) (Poland) (TV)
- Argentina Video Home (2008) (Argentina) (DVD)
- Canadian Television (CTV) (2008-) (Canada) (TV)
- Kanal 2 (2010) (Estonia) (TV)

- Prizma (2011) (Hungary) (TV) (re-release)
- ProSieben Television (2008-) (Germany) (TV)
- RTL Klub Televízió (2008-) (Hungary) (TV)
- Ren-TV (2008-) (Russia) (TV)
- Sorozat Plusz (2011-2012) (Hungary) (TV) (re-release)
- Super! Drama TV (2009) (Japan) (TV)
- TV3 Television Network Ireland (2008-) (Ireland) (TV)
- VT4 (2008-) (Belgium) (TV)
- Veronica (2009-) (Netherlands) (TV)
- Virgin 1 (2008-) (UK) (TV)
- Warner Home Video (2008) (Belgium) (DVD) (season 1)
- Warner Home Video (2009) (Japan) (DVD)
- Warner Home Video (2009) (Netherlands) (DVD) (season 1)
- Warner Home Video (2008) (USA) (DVD) (season 1)
- Warner Home Video (2009) (USA) (DVD) (Blu-ray) (season 2)
- Warner Home Video (2008) (Brazil) (DVD)

## **Terminator Salvation (2009)**

### ***Production Companies***

- Halcyon Company, The (presents)
- Wonderland Sound and Vision (in association with)

### ***Distributors***

- Warner Bros. Pictures (2009) (USA) (theatrical)
- Columbia Pictures (2009) (Non-USA) (theatrical)
- Sony Pictures Worldwide Acquisitions (SPWA) (2009) (Non-USA) (theatrical)
- Audio Visual Entertainment (2009) (Greece) (theatrical)
- Falcon (2009) (Czech Republic) (theatrical)
- ITA Film (2009) (Slovakia) (theatrical)
- InterCom (2009) (Hungary) (theatrical)
- Sony Pictures Entertainment (2009) (Japan) (theatrical)
- Sony Pictures Releasing (2009) (Argentina) (theatrical)
- Sony Pictures Releasing (2009) (Belgium) (theatrical)
- Sony Pictures Releasing (2009) (Chile) (theatrical)
- Sony Pictures Releasing (2009) (Germany) (theatrical)
- Sony Pictures Releasing (2009) (France) (theatrical)
- Sony Pictures Releasing (2009) (UK) (theatrical)
- Sony Pictures Releasing (2009) (Italy) (theatrical)
- Sony Pictures Releasing (2009) (Netherlands) (theatrical)
- Sony Pictures Releasing (2009) (Singapore) (theatrical)
- Walt Disney Studios Motion Pictures Finland (2009) (Finland) (theatrical)

- Walt Disney Studios Motion Pictures Norway (2009) (Norway) (theatrical)
- Walt Disney Studios Motion Pictures (2009) (Sweden) (theatrical)
- Warner Bros. Entertainment (2009) (Canada) (theatrical)
- Lotte Entertainment (2009) (South Korea) (all media)
- Mars Entertainment (2009) (South Korea) (all media)
- Sony Pictures Home Entertainment Nordic (2009) (Finland) (DVD) (Blu-ray)
- Sony Pictures Home Entertainment (2009) (Argentina) (DVD)
- Sony Pictures Home Entertainment (2009) (Argentina) (DVD) (Blu-ray)
- Sony Pictures Home Entertainment (2009) (Belgium) (DVD)
- Sony Pictures Home Entertainment (2009) (Belgium) (DVD) (Blu-ray)
- Sony Pictures Home Entertainment (2010) (Brazil) (DVD)
- Sony Pictures Home Entertainment (2009) (Germany) (DVD)
- Sony Pictures Home Entertainment (2009) (Germany) (DVD) (Blu-ray)
- Sony Pictures Home Entertainment (2009) (UK) (DVD)
- Sony Pictures Home Entertainment (2009) (UK) (DVD) (Blu-ray)
- Sony Pictures Home Entertainment (2009) (Netherlands) (DVD)
- Sony Pictures Home Entertainment (2009) (Netherlands) (DVD) (Blu-ray)
- Sony Pictures Home Entertainment (2009) (Sweden) (DVD)
- Sony Pictures Home Entertainment (2009) (Sweden) (DVD) (Blu-ray)
- Turner Network Television (TNT) (2011) (USA) (TV)
- Warner Home Video (2009) (USA) (DVD)
- Warner Home Video (2009) (USA) (DVD) (Blu-ray)

- **Total Recall (1990)**

***Production Companies***

- Carolco Pictures
- Carolco International N.V. (uncredited)

***Distributors***

- TriStar Pictures (1990) (USA) (theatrical)
- Canal+ Droits Audiovisuels (1990) (France) (theatrical)
- Columbia Films (1990) (Spain) (theatrical)
- Columbia TriStar Films (1990) (France) (theatrical)
- Elliniki Kinimatografiki Enosi (ELKE) (1990) (Greece) (theatrical)
- Finnkino (1990) (Finland) (theatrical)
- Penta Film (1990) (Italy) (theatrical)
- Scotia International Filmverleih (1990) (West Germany) (theatrical)
- Svensk Filmindustri (SF) (1990) (Sweden) (theatrical)
- Carolco Home Video (1990) (USA) (VHS) (pan and scan for Live Home Video)
- Home Video Hellas (HVH) (1991) (Greece) (VHS)
- Image Entertainment (1991) (USA) (video) (laserdisc)

- LK-TEL (1991) (Argentina) (VHS)
- Oy Europa Vision AB (1991) (Finland) (VHS)
- Pioneer (1992) (USA) (video) (laserdisc)
- American Broadcasting Company (ABC) (1993) (USA) (TV)
- Mainostelevisio (MTV3) (1995) (Finland) (TV) (2003) (2005)
- Live Home Video (1994) (USA) (video) (laserdisc)
- Pioneer Entertainment (1995) (USA) (video) (laserdisc)
- Artisan Entertainment (1997) (USA) (DVD)
- 20th Century Fox Home Entertainment (1999) (USA) (DVD)
- Kinowelt Home Entertainment (2000) (Germany) (DVD)
- Sandrew Metronome Distribution (2001) (Finland) (DVD) (1-disc edition)
- Sandrews (2001) (Sweden) (DVD)
- Momentum Pictures Home Entertainment (2005) (UK) (DVD)
- Lions Gate Films Home Entertainment (2006) (USA) (DVD) (Blu-ray)
- Sandrew Metronome Distribution (2006) (Finland) (DVD) (3-disc edition)
- Maple Pictures (2007) (Canada) (DVD)
- Momentum Pictures Home Entertainment (2007) (UK) (DVD) (HD DVD)
- Studio Canal (2007) (France) (DVD) (HD DVD)
- Warner Home Video (2007) (Sweden) (DVD) (HD DVD)
- Universal Pictures Benelux (2008) (Netherlands) (DVD)
- Universal Pictures Benelux (2008) (Netherlands) (DVD) (Blu-ray)
- IPA Asia Pacific (2009) (Thailand) (DVD)
- Universal Pictures Nordic (2009) (Sweden) (DVD)
- Universal Pictures Nordic (2009) (Sweden) (DVD) (Blu-ray)
- Panorama Distributions (2010) (Hong Kong) (DVD) (Blu-ray)
- Universal Pictures Benelux (2010) (Netherlands) (DVD) (Blu-ray) (collector's edition) (steelbook)
- Artisan Entertainment (USA) (VHS)
- Avid Home Video (1994) (USA) (VHS)
- Casablanca Video (1992) (Brazil) (VHS)
- Columbia TriStar Home Video (1995) (Philippines) (VHS)
- First Release Home Entertainment (1990) (Netherlands) (VHS)
- Flashstar (199?) (Brazil) (VHS)
- Front Row Filmed Entertainment (2009) (United Arab Emirates) (DVD) (Middle East)
- IPA Asia Pacific (2012) (Vietnam) (video)
- Lionsgate Home Entertainment (2007) (USA) (DVD) (2 film set)
- Live Video (USA) (DVD)
- Publivideo, Lda. (1992) (Portugal) (VHS)
- RCA/Columbia Pictures Home Video (19??) (Australia) (VHS)

## **Tron (1982)**

### ***Production Companies***

- Walt Disney Productions
- Lisberger/Kushner

### ***Distributors***

- Buena Vista Distribution Company (1982) (USA) (theatrical)
- 20th Century Fox of Germany (1982) (West Germany) (theatrical)
- Greater Union Organisation (GUO) (1982) (Australia) (theatrical)
- Toho-Towa (1982) (Japan) (theatrical)
- Walt Disney Company (1982) (UK) (theatrical)
- Walt Disney Productions (1982) (France) (theatrical)
- Buena Vista Home Entertainment (2002) (UK) (DVD)
- Buena Vista Home Entertainment (2002) (Sweden) (DVD)
- Disney Channel (1983) (USA) (TV)
- Gativideo (198?) (Argentina) (VHS)
- Walt Disney Studios Home Entertainment (2011) (USA) (DVD) (Blu-ray)

### **Tron Legacy (2010)**

#### ***Production Companies***

- Walt Disney Pictures (presents)
- Sean Bailey Productions (as Sean Bailey)
- LivePlanet

#### ***Distributors***

- Feelgood Entertainment (2010) (Greece) (theatrical)
- Forum Hungary (2010) (Hungary) (theatrical)
- Walt Disney Studios Motion Pictures (2010) (Argentina) (theatrical)
- Walt Disney Studios Motion Pictures (2011) (Belgium) (theatrical)
- Walt Disney Studios Motion Pictures (2010) (Canada) (theatrical)
- Walt Disney Studios Motion Pictures (2011) (Germany) (theatrical)
- Walt Disney Studios Motion Pictures (2011) (France) (theatrical)
- Walt Disney Studios Motion Pictures (2010) (UK) (theatrical)
- Walt Disney Studios Motion Pictures (2010) (Japan) (theatrical)
- Walt Disney Studios Motion Pictures (2011) (Netherlands) (theatrical)
- Walt Disney Studios Motion Pictures (2010) (Singapore) (theatrical)
- Walt Disney Studios Motion Pictures (2010) (USA) (theatrical)
- FX Network (2013) (USA) (TV)
- Home Box Office (HBO) (2012) (Netherlands) (TV) (limited)
- Walt Disney Studios Home Entertainment (2011) (Argentina) (DVD)

- Walt Disney Studios Home Entertainment (2011) (Argentina) (DVD) (Blu-ray)
- Walt Disney Studios Home Entertainment (2011) (Netherlands) (DVD)
- Walt Disney Studios Home Entertainment (2011) (Netherlands) (DVD) (Blu-ray)
- Walt Disney Studios Home Entertainment (2011) (USA) (DVD)
- Walt Disney Studios Home Entertainment (2011) (USA) (DVD) (Blu-ray)
- Zon Lusomundo Audiovisuais (2011) (Portugal) (all media)

## **Ultraviolet (2006)**

### ***Production Companies***

- Screen Gems (presents)
- Ultravi Productions

### ***Distributors***

- Sony Pictures Entertainment (SPE) (2006) (worldwide) (all media)
- Screen Gems (2006) (USA) (theatrical)
- Buena Vista International (2006) (Switzerland) (theatrical)
- Gaumont/Columbia TriStar Films (2006) (France) (theatrical)
- Jemi Vision (2008) (India) (theatrical) (only Tamilnadu)
- Jemivision (2008) (India) (theatrical)
- Pyramid (2006) (Russia) (theatrical)
- Sony Pictures Releasing (2006) (Germany) (theatrical)
- Sony Pictures Releasing (2006) (Netherlands) (theatrical)
- Sony Pictures Releasing (2006) (Singapore) (theatrical)
- Columbia TriStar Films de Argentina (2006) (Argentina) (all media)
- Hollydan Works (2007-2008) (Serbia) (DVD)
- LK-TEL (2006) (Argentina) (DVD)
- LK-TEL (2006) (Argentina) (VHS)
- Sony Pictures Home Entertainment (2007) (Greece) (DVD)
- Sony Pictures Home Entertainment (2006) (Netherlands) (DVD)
- Sony Pictures Home Entertainment (2007) (Netherlands) (DVD) (Blu-Ray Disc)
- Sony Pictures Home Entertainment (2006) (USA) (DVD)
- Universal Pictures Finland Oy (2006) (Finland) (DVD)

## **Voyage to the Planet of Prehistoric Women (1968)**

### ***Production Companies***

- Filmgroup, The
- Roger Corman Productions (uncredited)



### ***Distributors***

- American-International Television (AIP-TV) (1968) (USA) (theatrical)
- Alpha Video Distributors (2004) (USA) (DVD)
- Mill Creek Entertainment (2007) (USA) (DVD)
- Reel Media International (2005) (worldwide) (all media)
- Reel Media International (2007) (worldwide) (all media)
- Retromedia Entertainment (2003) (USA) (DVD)