"Breaking the Code of *The Matrix*; or, Hacking Hollywood to Liberate Film" William B. Warner©

Amusing Ourselves to Death

The body is recumbent, eyes are shut, arms and legs are extended and limp, and this body is attached to an intricate technological apparatus. This image regularly recurs in the Wachowski brother's 1999 film *The Matrix*: humanity arrayed in the numberless "pods" of the power plant; Neo's muscles being rebuilt in the infirmary; the crew members of the Nebuchadnezzar go into

their chairs to receive the shunt that allows them to enter the Construct or the Matrix. At the film's end, Neo's success is marked by the moment when he awakens from his recumbent posture to kiss Trinity back. The recurrence of the image of the recumbent body gives it iconic force. But what does it mean? Within this film, the passivity of the recumbent body is a consequence of network



architecture: in order to jack humans into the Matrix, the "neural interactive simulation" built by the machines to resemble the "world at the end of the 20th century", the dross of the human body is left elsewhere, suspended in the cells of the vast power plant constructed by the machines, or back on the rebel hovercraft, the Nebuchadnezzar. The crude cable line inserted into the brains of the human enables the machines to realize the dream of "total cinema"—a 3-D rendering that can pass as reality to those receiving the Matrix data feed.¹ These bodies may be a figure for viewers subject to the all absorbing 24/7 entertainment-system being dreamed up by our media moguls, but the difference between these recumbent bodies and the film viewers who sit in darkened theaters to enjoy *The Matrix* is one of degree. The Matrix subordinates its denizens more fully than TV or cinema because of the digital and network technologies used for forge its simulations.

Philip K. Dick has argued that the generic game of science fiction consists in starting with the world as we know it, effecting a single consequential dislocation, and then pursuing its ramifications, as it transforms the given world. *The Matrix* explores the implications of the following question: what if everything humans experience could be digitalized? Not just the alphabet, sound, and images (as we see happening on the screens all around us), but other sensory signals like smell, taste, touch, silent thought, body image, and everything else necessary for humans to feel that they are living ordinary experience. Secondly, if that software code could then be translated into neurological signals and

streamed into human minds, wouldn't that stream of signals appear as "real"—perhaps even be as real—as the "real world?" Further, because the code that composes this world would be transparent to its inhabitants, humans would not know that their entire reality was in fact a species of media, a digital simulation. Those who constructed such a simulated world and embedded humans within it would have remarkable power to arouse, entertain and distract, but still more crucially to create what would appear as reality. This is the moment of maximum determination by the Matrix media system, but that idea spawns an equally radical idea of freedom. If an individual could crack the code upon which the Matrix is based, and hack his or her way into that media simulation, then that individual might play by an entirely new set of rules—evading the laws proper to that simulation, for example, gravitation, inertia, the law of the conservation of matter, and so on. In *The Matrix* the hacker's power results from using the magic of software to reconfigure a network designed by others.

What is so pernicious about the ultimate entertainment system called the Matrix? According to an influential interpretation of modernity, we inhabit a world where the advance of technology, information, and entertainment is being used to expand an "instrumental rationality" that threatens human freedom. Within the cultural critique of the Frankfurt school, and across a very broad arc of 20th century science fiction, humans are menaced with a loss of what makes them human—of the freedom that assures their existence as ethical ends-inthemselves. When they fall under the power of some instrumentality acting according to a logic or rationality not their own, humans become means rather than ends. The giant machines of the industrial masters in *Metropolis* (1929?) offer a familiar Marxist symbol of technology in the service of social control. However, instrumental rationality assumes many other forms in science fiction of the 20th century: as the autonomous intelligence of the defense computers run amuk in Colossus: the Forbin Project (1969); as the instructions "mission control" sends to HAL but hides from the crew in 2001: A Space Odyssey (1968), and as in the biogenetic design used by the "men's association" in The Stepford Wives (1975), or the Tyrell Corporation in Blade Runner (1982). In each case, the advanced technology functions as sign and instrument of domination.

Those put to sleep within the Matrix simulation are held in the thrall of a technological instrumentality still more wide-ranging and insidious than those in these earlier films. Instrumental rationality is also a feature of the social world within the Matrix. When Mr. Thomas Anderson shows up for work late, his boss Mr. Rhineheart propounds a familiar version of employee instrumentality by attributing the success of MetaCorTechs Corporation to that fact that "every single employee understands that they are part of a whole." (Art, 287)² In designing the look of the Matrix, the visual designers communicated its rationality covertly by using grid patterns in walls, floors, ceilings, so it looked "built as a machine would build it." (Bill Pope, *Revisited*) Life on the Nebuchadnezzar hovercraft mirrors the instrumental rationality of the machines: it is designed with brutal utility; the white backgrounds of the Construct suggest its austere functionality ("It is our loading program. We can load anything from clothes, to weapons to training simulations. Anything we need."(Art, 309); finally, life on the

Neb entails a Spartan diet of "glop" grown in vats and eaten every meal (Dozer proudly insists it offers "Everything your body needs." (Art, 332—film variant) Two crew members protest the Neb crew's abstemious refusal of sex and good food. Mouse insists Dozer's recipe does *not* have "everything the body needs," and designs "the Woman in Red" for the Construct and offers Neo a private meeting with her. (Art, 333). While he savors a piece of rare beef in his deal making dinner with Agent Smith, Cypher justifies his decision to be reinserted into the Matrix, with these words: "After nine years, do you what to know what I've realized? ... Ignorance is bliss." (Art, 331) However morally reprehensible, Cypher betrayal of the Neb crew offers a conceptually coherent choice of the pleasures lost through his extraction from the Matrix--from good food to the illusion of his own autonomy--over the dour discipline of life on Morpheus's ship.

The dystopian scenario of the film—humanity trapped in the Matrix—and its liberation narrative imply two divergent interpretations circulating in the 1990s of the difference that computerization and networking are making for culture. According to the first interpretation, as epitomized by the makers of big budget Hollywood films, computers are not new, nor do they change anything fundamental about telling good stories. Within the performance or broadcast model favored by the media industry—they make content, and we sit back and enjoy it—technology has a subsidiary and instrumental role as a new way to produce or deliver product. For example, the computer is a way to develop special effects that produce a more compelling because more believable simulation: a pig named Babe who looks like he's talking, or characters who are 100% digital computer graphics image, like Jar-Jar Binks from *Star Wars I: The Phantom Menace*. In addition, digitizing allows the development of inventive new formats—like the DVD.

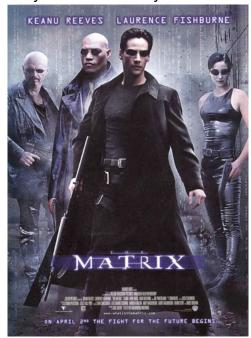
While *The Matrix* makes extensive use of digital technology, it also critiques this narrowly instrumental conception of technology, and offers a much more favorable one in its place. *The Matrix* was conceived and developed between 1993 and 1997, and it is marked by those heady early days of the World Wide Web, when enthusiasm for the liberating possibilities of the Internet reached a high point. For the denizens of the Net, the rise of the Internet creates a fundamental mutation in the media sphere, a newly "wired world" we can inhabit. Because of the flexibility with which digital content can be copied, remixed, and transmitted as computer files to networked users, the owner of the networked computer accedes to technologies of media inscription that in many ways exceed what was possible at the centers of the old analogue broadcasting empires. According to the emancipation narrative told by the Internet companies of northern California, technology has transformed subjected consumers into "empowered" users. Now the skilled hacker can reconfigure the media sphere as a zone of personal empowerment and freedom.

The Wachowski brothers refuse the answer the question Slavoj Zizek poses of their film, whether social life in "cyberspace" will ultimately "intensify" our experience, or expose it to manipulation (*Lacanian Ink*, June, 1999) Instead, the Wachowski brothers' film incorporates the millennial hyperbole of the cyber evangelists and the dystopian warnings of the techno-luddites as they sounded

throughout the last two decades of the 20th century. The totalizing conceptual framework of both positions give *The Matrix* the sublime abstractness, moral urgency, and the grandeur of what the Wachowski brothers say they are trying to create: a "mythology relevant in the modern context" where "the Internet inform(s) culture." (Larry Wachowski in Weinraub, NYT, 4/5/99)

In the essay that follows, I will argue that *The Matrix* offers an allegory: the machines who designed the Matrix simulation represent the dominant entertainment system (Hollywood), and the human rebels of the Nebuchadnezzar represent the libertarian hackers who assure the freedom of information. entertainment, and the networks that carry them. Thus when Agent Smith pauses to wonder at the oblivion-inducing power of the Matrix, he sounds like the media mogul entertainment empire in a caricature that might be sketched by the dystopian media critic Neil Postman, author of Amusing Ourselves to Death: "Have you ever stood and stared at it, Morpheus? Marveled at its beauty. Its genius. Billions of people just living out there lives...oblivious." (Art, 361) Within such a parable of media determinism, the passive consumer, like the human batteries of the Matrix, "powers" the entertainment system (with our money, our attention, and our fanatical love), thereby giving it the power to dominate us. By contrast, Morpheus, in giving Neo the tour of the Nebuchadnezzar, struts his technological stuff with the outsider arrogance of a rebel-hacker: "MORPHEUS: And this, this is the Core. This is where we broadcast our pirate signal and hack into the Matrix." [footnote: Edward Rothstein offers a this formulation of "the hacker myth" as it is given irresistible expression in The Matrix. "The hacker is a rebel, an iconoclast, a seer. The hacker is a kind of cyber-revolutionary for whom

the villains are not economic capitalists but information capitalists and controllers: the corporation, the government and the media. The digital truth, the hacker proclaims, should be free and shall set us free." NYT, April 17, 1999l But aren't the Wachowski brothers thoroughly embedded in the media system they critique? Wasn't The Matrix "the movie that maldle people think it's time to buy a DVD player?" [Newsweek, May 1, 2000]. [Image: poster] For scholars who study the film industry's pivotal role in the "military industrial" entertainment complex", the idea that the Wachowski brothers have found a way to use Warner Brothers to do media critique, the idea that The Matrix hacks Hollywood, is risible. In films like Meet John Doe and Network, Hollywood has often used critique of *other* media (newspapers, radio, television) to



fashion implausible stories of liberation.[In films like *Meet John Doe* (1941), *Face in the Crowd* (1957), and *Network* (1976) those creating the films (Frank Capra, Elia Kazan, and Sidney Lumet/ Paddy Chayefsky) are confident that they can

develop cinema so that it is a medium on the side of critique, self-consciousness and liberation.] Traditional media effects criticism too often fails to go beyond this stark polarity of control and freedom, of whether there is cooptation of the spectator by big media, or appropriation of big media by the user. In order to trace how *The Matrix* complicates these polarities, we need to go into *The Matrix*, to see, if you will, "how deep the rabbit hole goes."

What is the Matrix?

Because science fiction is a fictional genre that visualizes the unseen, and because cinema is the 20th century's most influential technology of visualization, it is no surprise that the convergence of science fiction and film has been aesthetically productive and culturally significant. [footnote: Vivian Sobchack makes the case for the cultural importance of science fiction film in Screening Space: the American Science Fiction Film. Statics on the highest grossing films regularly include *Star Wars* and ET. (see for example: http://movieweb.com/movie/alltime.html) Finally, at the time of their making, critically significant science fiction films were among the most expensive films made: Metropolis (1927) and Blade Runner (1982)] In The Matrix, film's powers of representation come in for sustained critique. The enslavement of billions by the Matrix simulation suggests the sinister outcome of those virtual systems of representation--photography, cinema, and virtual reality—used to produce ever more powerful, because ever more precise, photorealistic simulations of reality. Some promoters of virtual reality in the 1990s assumed that the steady technical development of virtual reality would eventually achieve perfect simulation of reality, but with these important advantages: each person will then be able to exercise personal control of their virtual worlds, whether to enjoy intense new forms of immersive entertainment, build on-line communities, or create new forms of art.[In Remediation, Jay Bolter and Richard Grusin describe and critique this position, 28, 119. In The Soft Edge, Paul Levinson offers a "natural history" of media that seeks to demonstrate how media technologies converge on the sensory norms of human experience. Alternatively, in his writing on virtual reality, Michael Heim insists that the creative social and ethical opportunities that virtual reality provides do *not* depend upon high resolution.] In *The Matrix* the perfection of simulation leads not to personal freedom but to bondage, not to the control of "reality" but to its loss. This science fiction outcome for VR technology exposes a desire often implicit in the virtual reality project: those who want a more intense experience of reality turn toward a computer-driven virtuality to get it, but, by supplementing reality with the virtual, they in fact replace the reality they sought to perfect. [footnote: Of course this theme lies at the center of Jean Baudrillard's Simulacra and Simulation, a book that makes an appearance in the The Matrix.

The Matrix scenario underlines an idea familiar from the history of media criticism: the more complete and involving a media system, the more it threatens the human subject with the loss of the body. The worry about the mindless absorption and compulsive repetition induced by different forms of entertainment is as old as Plato's condemnation of poetry and music and the 18th century attack on novel reading. [Warner, *Licensing Entertainment*, chapter 4] The claim that

that modern media function as a mind-numbing, trance-inducing drug, is coextensive with the emergence of cinema, radio and television. This idea gets its characteristically American expression in the warning that the most susceptible media consumers—usually children and teens—are living too much of their life linked to electronic media, whether by watching television, VHS tapes, or DVDs, by playing video games, or by going on line in virtual spaces, chat rooms, or doing instant messaging. Behind this discourse is the argument, given systematic shape by Marshall McLuhan, that the forms and practices of media are now having a determining influence on culture. The development of computer-based media has given a radical new meaning to the worry that human minds are being separated from human bodies. As Norbert Weiner noted in the late 1940s, once you takes intelligence out of the human mind, and locate it in computers, you begin to make human bodies (with feelings, a need for sleep, etc.) vulnerable to obsolescence.[Weiner] Once humans accept their operational inferiority to intelligent machines, humans may begin to dream of trading the "meat" they are born with, and the "dving animal" they are tethered to through life, for an immortal form of virtual embodiment. Katherine Hayles has developed a sustained critique of cyber prophets like Hans Moravec who look forward to the day when humans can achieve immortality by "downloading human consciousness into a human computer." [How We Became Posthuman, 1.] The Matrix offers a dystopian realization of the idea that cyberspace and Internet connectivity will divide mind from body. [footnote: In an alternative argument, Chad Barnett sees the film as affirming the value of virtual reality, of accepting the postmodern condition, and offering a "cognitive map of cyberspace."

The Matrix simulation also gives hyperbolic expression to a third worry: that linking our life to the network might expose us to surveillance and control by others. Thus although the architecture of the Web began as open source and non-proprietary, and although its founding ethos was participatory and libertarian, Lawrence Lessig and Andrew Shapiro, in critical scenarios that are rich with the creative paranoia of science fiction, have shown how the Internet could be reconfigured for regimes of surveillance, censorship, absolute copyright, and social control. For example, the "control revolution" Shapiro attributes to the Internet pushes him toward a paradox also addressed by Lawrence Lessig in Code and Other Laws of the Internet: personal control of media intensifies potential control by media. Both authors argue that the wrong kind of digitalization—for example by retreating from the open source principles of the first Internet— could change the game in fateful ways. One can hear this dystopian s/f discourse at work in Andrew Shapiro's account of the stakes in the way we manage the new digital network: "The challenge is to ensure that we do not become 'automatons who live under the illusion of being self-willing individuals."(Control Revolution, 186) Sounds to me like life in the Matrix.

However, from the vantage point of hackers on the Neb, this Matrix is also a network you can hack, a prison with many back doors. The Neb hackers can only move in and out of the Matrix because the power and knowledge of the Matrix designers and administrators is not absolute. For example, their knowledge cannot be as complete as "big brother's" in Orwell's 1984. In fact, the

film's answer to its own constantly reiterated question "what is the matrix?" is thus left deliberately incomplete, and the precise degree of control of the machines over the Matrix is difficult to gauge. [footnote:. The film's official Warner Brothers website is named whatisthematrix.com. There, prominent comics writers explore the idea of the Matrix (for example, examining what would happen if you chose the blue pill...); and Japanese anime, called "Animatrix", are promised for 2002. Fans continue to puzzle over the implications of the Matrix, and the directors promise more information about it in the sequels, Matrix Reloaded and Matrix Revolutions.] Certain features give the machines partial control of what happens in the Matrix. They have programmed the Matrix to include the "agents," "sentient programs" that have the capacity to go in and out of any "person" "hardwired" to the Matrix; the machines have the ability to make on-the-fly modifications of the Matrix's design so, for example, phone lines are cut and windows filled in; this explains why, as Morpheus tells Neo, "time is always against us."(Art, 301) At the climax of the history lesson he gives Neo, after Morpheus poses the question, "what is the Matrix?" he pauses briefly, and inflects his sonorous voice into a dull pitch to deliver the one word answer, "Control." (Art, 313) But here Morpheus is describing design goals for the Matrix, rather than ends actually achieved, and this is where utopian possibilities open up within a dystopian system. Like any IT network designed for simultaneous use by large numbers and like any software program with numberless lines of code. the Matrix is dense, plural, and imperfect. As a metaphorical "place" the Matrix is presented as vast, aging, and assembled through augmentation of the old quaint phones and thick metal phone lines, into which the Neb crew can jack. [Tank to Neo: "I got a patch on an old exit. Wabash and Lake": (Art 386)] Therefore the Matrix can be modified, hacked into, and become a site for adventure. In short, the Matrix functions like the networks Kevin Kelly describes in a book that the Wachowski brothers made required reading for Keanu Reeves, Out of Control: the New Biology of Machines, Social Systems and the Economic World (1994). [Matrix Revisited] The Matrix is a system that is complex, selforganizing, distributive, dynamic, "coevolving," and not fully comprehensible by any one. In short, The Matrix is "out of control," in Kelly's counter-intuitive celebratory sense of the term. [Kelly, 25-28; 194; 451]

Fashioning a hero by hybridizing the cyberpunk hero and the comics superhero

In order to develop their alternative to "the Assembly-line action movies that are devoid of any intellectual content," the Wachowski brothers balance the braininess of science fiction with the archetypal characters and exuberant action of the comics. [Larry Wachowski, American Cinematographer, 33] The dark dystopian idea of the Matrix as an invisible "prison" for humanity, and the Wachowski brothers' thoughtful development of the concept of the Matrix, help to align this film with intellectual science fiction. This strain of science fiction broods, the way Arthur Clark does in 2001: A Space Odyssey, about the long term implications of the co-evolution of man and technology (from bone to space ship); it speculates about the emergence of new hybrids of humans, animals and

machine, as Donna Haraway does in A Cyborg Manifesto; and, as I have already noted, it imagines the Matrix as a total media system. But reviewers of *The* Matrix immediately recognized that the aesthetic distinctiveness of the film arose from the way it hybridized a relatively new species of intellectual science fiction cyberpunk fiction—with superhero comics. [See for example, Rothstein, Edward. "A Hacker's Haunting Vision of a Reality without Illusion" New York Times, April 17, 1999. From cyberpunk fiction comes the alienated, deracinated hacker, who uses the computer interface to move easily back and forth between the ordinary world and a virtual world of cyberspace. In William Gibson's development of the genre, the narrative culminates with the hacker-protagonist's risky "run" into cyberspace, like the one Neo makes with Trinity to save Morpheus. [footnote: Two other elements of the film seem indebted to Neal Stephenson's influential cyberpunk novel Snow Crash. First, the hacker hero, named Hiro, is also a kungfu champion, and the novel is full of physical action strongly indebted to comics. Secondly, the novel imagines the way computer code and neurological signals become functionally equivalent. "Snow crash" refers to the way a computer screen goes white when it crashes. In the novel, if a computer virus infects a character while in cyberspace (a virtual world named "Metaverse") then it will cause the human brain behind the Metaverse avatar to "crash" as well. [After his injury in the Construct, Neo says to Morpheus: "I thought it wasn't real" Morpheus: "Your mind makes it real...The body cannot live without the mind" (Art. 322)] But the Wachowski brothers eschew all that is bohemian, post-modern and "marginal" about cyberpunk fiction and its heroes. To develop a cyberpunk science fiction film that will have the grandeur of myth, and succeed among the audiences sought by a big-budget 62 million dollar film, the Wachowski brothers draw upon superhero comics, where they find a narrative scenario and visual style they incorporate into *The Matrix*. Like Superman or Batman before him, Neo performs extraordinary feats of action against sinister forces; like theirs, his task is nothing less than to save the world. Within this comics genre, *The Matrix* is, as the film's cinematographer Bill Pope explains, an "origin' story, which outlines the beginnings of a superhero." [Pope, American Cinematographer, 80:4, 34] Here, an "ordinary guy" learns to assume his role as a hero. [footnote in fan version to Reeves clowning about becoming a superhero]

The indebtedness of *The Matrix* to comics goes beyond character and action; it is also central to the visual syntax of the film. The Wachowski's first creative publication is the comic book, *Ectokid*, made in collaboration with the comics artist, Steve Skroce. When the script of *The Matrix* did not convince Warner Brothers to buy the film, the Wachowski brothers hired Skroce, and worked on every panel with him, so as to translate the script into a 600 page comic book. That comic book not only sold the film to Warners, it also became the beginning point for the composition of each film shot during shooting. Although this comic book is retroactively interpreted as "story boards", it is more than this. In a very real sense, *The Matrix* starts as a comic book. The Wachowski brothers expand the repertoire of the action-adventure film by translating the expressive hyperbole of comics into film. As Larry Wachowski explains it in one interview, the goal is to "freeze a moment and make an image

that sort of sustains...and has a kind of power." (sic, Matrix Revisited) To freeze a powerful image of a powerful action becomes the film's guiding aesthetic strategy. In the composition of the comic book panels and in using a viewfinder on the set, the brothers "take an event...hold it up...and flip it around," looking at from every angle until they find "the most emotionally evocative" moment of each scene (Keanu Reeves and John Gaeta in Matrix Revisited, "The Road to the Matrix").[IMAGE: Neo's fist stopping short of Morpheus in Dojo scene.] The same rhetoric of the power image is invoked to describe the editing of the film. The editor Zach Staenberg explains that a "core shot" is the starting point for each scene, and the scene is made to build up to and down from that shot. [Matrix Revisited] This desire to seize the power image, especially during the film's action sequences, helps to explain the filmmakers' recourse to digital special effects, and in particular the development of the new extreme slow motion technology they dubbed "bullet time." Only with this technology can the film hold the frozen image—think of Trinity hovering high in the air, arms extended out in the stylized posture of a Balinese dancer, legs coiled to strike her policeman ("with the force of a wrecking ball", Art, 276)—so that this kick has the visual power for the film viewer to turn a policeman into "a two-hundred-fifty

pound sack of limp flesh" (276) [Image of Trinity about to; Art, 469 top] This image, taken from The Art of the Matrix, illustrates the relationship between the original comic book representation and its filmic realization. In this remarkable fusion of comics and film, a specific value—what Larry Wachowski calls "[the] incredible and beautiful images in violence" (sic.



American Cinematography, April 1999, 35)—is justified by the narrative scenario: in the Matrix, opponents are nothing more than software code. Within the Matrix and the Construct, the ritualized gliding movements of the Hong Kong kung-fu and the hyperbolic violence of comics and Japanese anime are fused with the realistic action of the sorts of film The Matrix producer Joel Silver has made for years, for example in The Lethal Weapon and Die Hard films. If it has been a goal of Western aesthetics to reconcile beauty and truth (Keats, Ode to a Grecian Urn), in contrast, the Wachowski brothers labor to reconcile what's cool with what's righteous. The hero's digitally assisted physical action offers more than a cathartic moment of spectacle for the viewer: "is-that-cool-or-what!" The directors also hope to make the iconic moment one of moral epiphany, where the audience can say, "Wow, he is the one!"

Neo's deciphering of the geography of his world (as bifurcated between Matrix simulation and the "desert of the real") and Neo's assumption of the role of

superhero (as "the One") are central actions of the narrative and the source of its dramatic tension. Because we become acquainted with this world at more or less the same rate as Neo, the film viewers are positioned to follow Neo on each stage of his odyssey, as he is subject to the Matrix illusion, but also as he acquires the techniques necessary for his role. In each stage of Neo's odyssey, the power of computer technology to render, decay, or reframe "reality" intrudes as an explicit issue. In the very first scene digital technology appears as the enigmatic green interface, a matrix array with voice-overs we cannot decipher. Once we are "within" the Matrix, software code evidences itself as those odd cues and anomalies that signify to Neo that there is something wrong with this "reality." [For example, "Knock knock on his computer screen is followed by the sound of "knock, knock" at his door] In the educational and training programs of Construct, the abstracting and compositional powers of digital technology are evidenced in the Construct's white background and in the morphs of the "history lesson" ["Welcome to the desert of the real"]. Finally, after Neo's death and his

awakening by Trinity, Neo sees the Matrix face to face, as green computer code. [IMAGE: 3 agents as code] In *The Matrix* the story of the rebirth of the hero who would liberate humanity from the machines becomes an allegory of the rebirth of a species (of digital) cinema that would liberate the viewer from Hollywood's sleepinducing practice of photorealism. Like The Matrix, Hollywood is crawling with agents; only hackers



can free us from bondage to their system of absolute copyright. To explore the implications of this thesis—both for how technology is lived and for the way films are made—I will interpret the changing relation between the protagonist and the Matrix simulation technology in the three parts of the film: the extraction of Neo from the Matrix (*The Matrix* DVD scenes 1-10); the education and training of Neo (scenes 11-26); and finally, Neo's assumption of his fate in returning to the Matrix to save Morpheus (scenes 27-37).

Part I: Extraction from the Matrix: deforming the simulation

How do you extract a person from an arbitrary system, if that person's perceptual apparatus has accommodated itself to it? The Matrix that holds Neo's mind in thrall at the beginning of the film is a descendent of cyberspace in William Gibson *Neuromancer*. (1984) In accounting for Gibson's invention of cyberspace as a locus of human points of view moving through data, critic Katherine Hayles links cyberspace to the mathematical concept of the matrix: "Cyberspace is created by transforming a data matrix into a landscape in which narrative can happen. In mathematics, 'matrix' is a technical term denoting data that have been arranged into an n-dimensional array." (Post Human, 38) But the

Wachowski brothers' cunning inversion of cyberpunk geography plays a trick on Neo. Instead of having a stable boundary between the real world of the hacker's ordinary life, and the virtual cyberspace into which he hacks, the Wachowski brothers make cyberpunk fiction "relevant" to their film by turning "what we view as the real world into a virtual world." (Larry W, *Time*, April 19, 1999, Jeffrey Ressner) Because both the interface and the delivery of the code of the simulation are invisible to the user, it is as though Neo lives immersed in a perfect 3-D film, in Morpheus' words, "a prison that you cannot smell, taste, or touch. A prison for your mind." (Art, 300)

The first third of the film describes the steps taken by the Neb crew to extract Neo from this false reality: the enigmatic warning clue Trinity puts on Neo's computer ("The Matrix has you." {Art, 281}); the catechism-like questions Trinity whispers in Neo's ear at the club ("You know the question just as I did." {285}); and, finally, Morpheus' failed attempt to guide Neo out of the MetaCorTech tower. Neo's problem is an epistemological one: he has no way to interpret the odd events in his world—like the "follow the white rabbit clue" or the "gummy mouth" that afflicts him during the interrogation scene. Neo cannot understand these Matrix clues and anomalies as evidence that his reality is nothing more than software code. To jar Neo out of this "dreamworld" something more primordial is necessary: an extraction that is part ritual, part medical procedure. To prepare him for this rite of passage, Morpheus gives Neo instruction. Like a therapist Morpheus tries to get Neo to confront his own halfconscious inner knowledge: "you know something...that there is something wrong with the world...a splinter in your mind, driving you mad." Morpheus offers a paradoxical description of the Matrix: "it is everywhere ... even in this room;" describes its function as to "blind you to the truth...that you are a slave, Neo." But there is a basic problem with these clues: neither we nor Neo can understand them because we may think Morpheus is speaking figuratively when, in fact, he is speaking literally. Morpheus admits the inadequacy of these answers when he insists on a distinction central to the whole project of filmic representation: the chasm between conceptual knowledge and experiential knowing, between being "told what the Matrix is" and seeing it "for yourself". Finally, Morpheus offers Neo a "last chance" to find out

"what_it_is."(Art, 300-1) Neo gives his free assent to this initiation by choosing the red pill and swallowing it.

The constructed, illusory nature of the Matrix reality becomes apparent in the sequence between his taking the red pill and being flushed out of the Matrix. Throughout the scene, Neo is passive; the crew's occult technical practices are a mystery to him; the passage into a new reality entails



his mutilation. As he is hooked up to electrodes and equipment, and evidences a

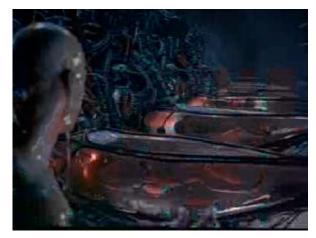
helpless disorientation, Neo becomes aware of an anomaly. He turns toward the broken mirror so he can see himself in the cracked mirror; but then it does something impossible, it "unbreaks." Neo's reality is diverging from that of others in the room. Like the doubting Thomas (Anderson) he still is, he reaches out his finger to test the reality of the mirror, a small bit of liquid breaks off on the tip of his finger, and then the liquid mirror



surface slowly spreads over his hand and up his arm to his neck, and finally down his mouth. In contrast with the celebrated special effects found in Terminator 2, this mirror is not an indestructible, phallic metal man that stands opposite us as an alien endowed with unique technological powers (to dissimulate his appearance; to reassemble after breaking). This mirror appears as a break within the Matrix's ambient 3-D environment, a startling metamophosis in the order of things, expressed through an ordinary mirror morphing into a surface, which menaces Neo with castration (his arm is being enveloped by this "cold" thing) and then suffocating envelopment. The Neb team's urgent "ER-style" race against time to achieve Neo's resuscitation is interspliced with a breakdown of the photorealistic film practice. Here special effects don't support the project of realistic representation; instead, Neo and we see "mirrors within mirrors, reality and reflections compounding into infinity." [Footnote: These are the words of storyboard artist Kunitake, describing the effect the Wachowski brothers were trying to effect. Art, 66-68] The mirror's morphing performs the dissolution of the 3-D illusionary space of film; the image takes on an unbounded, uncanny aspect, as a pure reflective surface that is nothing, but can reflect everything, the way a film screen does.

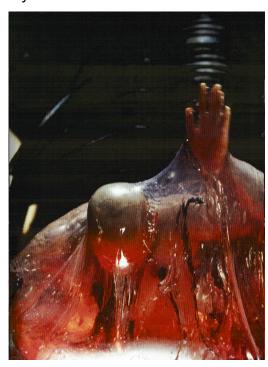
The breakdown of a normative photorealistic film space in the extraction

scene prepares for the dark truth behind the Matrix. Like many gothic protagonists, Neo finds himself trapped in the crypt containing bodies that are half-living and half-dead. With the chorus swelling, and lightning crackling through a "powers of 10 shot", Neo looks up and down the "stalks" of the power plant, where humans are arrayed in "petal"-like "pods." [Gaeta, American Cinematography, 47; Art, 262, overleaf] The trans-human scale of



the scene suggests the ethical geography of gothic fiction, where behind the banality of the ordinary visible realm there lurk dark regions of radical evil. [IMAGE of Neo's view of the Power Plant] Neo only has a few moments to experience the terror and dread of this sublime spectacle, before a monstrous biomorphic "DocBot" {Art 76}) flies into view, inspects him, and flushes him out of the power plant as a waste product, like a dead battery or failed part. The power plant scene helps motivate the gothic cast of the previous extraction scene. Morpheus's obstetrics team works in a gloomy room to the ominous crash of

lightning and thunder; they sport black garb, chalk white faces and oddly guilty expressions. Like Frankenstein, they are working on the taboo boundary between life and death, and practicing a kind of techno-gothic necromancy. The scenes of Neo's extraction from the Matrix remind us that the term "matrix" does not just refer to a mathematical array, but also means "a place or medium in which something is bred." In Late Latin the word "matrix" means "womb", and is derived from the Latin word for mother, "mater". When Neo awakens in the power plant, he makes a heroic effort at separation, by breaking through the gelatinous cocoon that encloses him. [Image: Neo's birthing in the power plant: Art, 477. 1 Neo is a 'new' man, born out of the bad mother of the Matrix, naked into reality.



Part II: Neo's Education: De-constructing the Matrix

Neo's extraction does not give him easy access to a self-evident world. Instead it requires reprogramming, learning a new role, an education that is

curiously dependent upon new media technologies. Between the extraction scene and the scene where Neo decides to re-enter the Matrix to save Morpheus. Neo's education resembles nothing so much as an actor being inserted into a film. Morpheus, serving as director, begins by stating a science fiction premise: Neo has entered the world of the future ("not what...but when"--not 1999 but "much closer to year 2199" {Art,



307}). Morpheus then gives Neo a tour of the ship/set and an introduction to the

"crew." While the ship has the close quarters and metallic functionality of a submarine, the Nebuchadnezzar also has the visual traits of a film set. Rather than being built of smooth components (like the modernist Star Ship Enterprise), the Neb has been retrofitted and repaired, its guts are all on the surface, wires are strung everywhere (Footnote: Owen Paterson, production designer in "Matrix Revisited"; Gaeta in commentary on film from DVD notes the importance of the film version of the film version of 20,000 Leagues Under the Sea). The "core" of the ship--with its array of screens--looks like a broadcast studio. [Image: Control room] Like the world of the future, and like the film sets of *The Matrix*, the Nebuchadnezzar is designed as of a perfect "marriage of machines and men." (Reeves, "Matrix Revisited") In order to accommodate Neo to Morpheus's "script," Morpheus tells him strange stories: about the victory of the machines over humanity, about the leader who freed some of "us" from the machines and prophesied the coming of "the One," about Morpheus's belief that Neo is that One.

In order to make these fantastic stories plausible, and prepare him for his role. Morpheus introduces him to the crew's most powerful technology, the virtual reality simulation program called "the Construct." Morpheus, the God of Dreams in Ovid's *Metamorphosis*, is trying to awaken Neo from the "Dreamworld" of the Matrix. While still in the Matrix, Morpheus had propounded the central thesis of epistemological skepticism: that if simulation is powerful enough, there is no way to distinguish it from reality. [footnote: During the extraction scene, in response to Neo's disbelieving fragment of a question, "did you?..." Morpheus responds by soothing him with a variant of Chuang-tze famous speculative paradox about the dream: "have you ever had a dream that was so real... How would you know the difference between the dream world and the real world?" This sophomoric meditation is appropriate to a moment where the film is asking Neo and the viewer to accept the equal validity, from the point of view of the experiencing subject—both Neo and the film viewer—of two alternative worlds. Chuang-tze version is more sly, poetic, and centered in nature: "Last night I dreamed that I was a butterfly. But how do I know that I am not a butterfly dreaming that I am a

man."] But the technology of the Construct allows Morpheus, [derived from the Greek word morphe, "shape,"] to manipulate as if by magic the shape of reality, and thereby allows Neo to experience the plasticity of the "real." As Morpheus demonstrates for Neo the kind of software-driven simulation technology that the machines had used to dupe him in the Matrix, the Wachowski brothers show the film viewers the sort of digital



compositing that is often hidden in the film's action sequences. [IMAGE: actor against a green screen] In making many of the scenes in *The Matrix*, actors are

photographed against a green screen for insertion in a different photo-realistic background, so, for example, Trinity can appear to jump between buildings. But in this scene, the background is left white. For Neo it is a bewildering non place: but it denotes the abstract space of digital film compositing. [footnote: This does not mean that this effect was produced through compositing: in fact, the effect was produced by a highly illuminated completely white room. "Commentary" on Matrix DVD] Morpheus' history lesson within the Construct confirms the general proposition J.P. Telotte has made about representations of technology in film. "Whenever our films depict or talk about the technological, they also reflexively evoke the forces that make cinema itself possible." (143) Morpheus, acting as the film director and compositor within the scene, can now make chairs and a television set appear; can invite Neo to a short viewing, and narrate a short documentary on the bizarre world of humanity dominated by machines. The history lesson is more than an anthology of haunting CG (Computer Graphics) shots; it is a self-conscious multi-media 2-D/ 3-D lecture-performance, where there is a deep coupling between the Construct Morpheus controls and his verbal commentary.

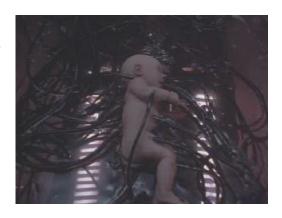
To teach Neo an unbelievable lesson, Morpheus must use a technology as convincing as the Matrix. But rather than going for the seamless continuity of dreams and the believability of the ordinary, Morpheus's lecture features surprising cuts and shocking images. When Morpheus snaps the remote control of the "deep image radiola TV," the "dreamworld" of the Matrix appears as one TV channel, and then, to present the bleak reality of today, Morpheus snaps to another. By then turning the TV screen into a portal through which the viewer can

zoom, Morpheus breaks the 2-D fontal conventions of television. Suddenly, we are in a 3-D virtual environment, the bleak mountainous panorama of the "real" world. The camera then pans down and zooms to the two faded red leather chairs before the TV, so the white void where Neo and Morpheus were sitting has changed into "the desert of the real," an enclosing dystopian world of destroyed nature, the Construct's alternative to the Matrix 3-D simulation. [IMAGE: the desert of the real]



As in self-referential meta-fiction, the very multiplicity of technologically controlled visual realities is shaped to produce distrust of any one. Morpheus keeps piling it on: he offers Neo a shocking montage of the machine's apparatus of control: the fetuses on stalks, the giant fetus harvester at work, the babies fed in the pods. These techno-gothic images of humankind bred by machines offer Neo a bizarre new account of his own origins: he is a "test tube baby" carried to term in a power plant. To drive home the truth of these images, the voice-over describes Morpheus' own horror and unbelief at this technology of control. Here is Morpheus' highly theatrical commentary:

For the longest time, I wouldn't believe it...and then I saw the fields with my own eyes, watched them liquefy the dead, so they could be fed intravenously to the living. And standing there, facing the pure horrifying precision, I came to realize the obviousness of the truth. What is The Matrix? Control. The Matrix is a computer generated dream world, built to



keep us under control in order to change a human being into this. {Morpheus holds up a battery to Neo}] [Art, 312-313]

What Morpheus describes is a metamorphosis--changing a human being into 'this' (a battery). Note the carefully chosen words, the rolling phrases, climaxing with a physical prop, and all delivered in Lawrence Fishburne's famously deep and sonorous voice. By pairing power images with power words, Morpheus invests his message with definitive authority. The lesson is supposed to bring Neo down from his trip, to de-toxify him, by inducing a "disconnect" with his residual (Matrix-controlled) reality. The lesson succeeds so well that Neo says what he never said while living within the Matrix: "I don't believe it...Stop! Let me out! I want out." (Art, 313)

Hacking with Good Kung-fu

If the history lesson is an antidote to the Matrix simulation, the kung-fu training teaches Neo the techniques necessary to fight the machines. Given the centrality of code to the system that enslaves mankind, it is appropriate that Neo is a hacker who also works for a major software company. But we never really see him sitting at his computer and hacking. This is not just because it would produce boring visuals. In this film Neo's hacking of the matrix is accomplished with Kung-fu and success depends upon having "good" kung-fu. In the Dojo training sequence a highly ritualized and aestheticized fighting is fused with the film's software premise. Morpheus begins by reminding Neo that he can hack

through the apparently binding physical laws (of gravity, speed) found in this simulated Matrix-like training program. After Morpheus beats Neo, he reminds him of his potential mastery of this place by asking, "do you believe that's air you're breathing now?"(Art, 329)

What rationalizes this rather implausible alignment of hacking and kung-fu? Hacking with kung-fu is the suture point where the cyberpunk s/f premise--the world



controlled by computers that can hacked--is linked to the superhero comics plot-saving the world with extraordinary action. This film plays up the similarity of hacking and kung-fu: both require good technique and a high degree of discipline; both provide occasions for the use of cunning, adaptation and improvisation; both activities are intrinsically individualistic, and both blend art and science. This resemblance may explain why 'kung-fu' is hacker slang for good code. Because of the way kung-fu subordinates physical technique to the inward spiritual powers of the kung-fu fighter, kung-fu confers imponderable spirituality upon hacking. The mysterious inward side of kung-fu helps to justify the clichéd new age injunctions Morpheus directs at Neo during the Dojo training scene: "You're faster than this. Don't think that you are, know that you are"; ..[A]II I can do is show you the door. You're the one that has to step through...."; "Let it all go. ...Free your mind." (Art, 319-320) The lesson for Neo is, if you can harmonize body and mind into good kung-fu, you can hack the Matrix.

In describing the decision to spend many months training the film's four leading actors to do their own kung-fu fighting, Larry and Andy Wachowski use their own rather spiritualized rhetoric of authenticity. While traditional action films make extensive use of stunt doubles so that an actor can *appear* to be doing remarkable physical things, *The Matrix* was intentionally cast, and the actors were extensively trained, so they could *act and do* most of their own fighting. This authentic unity of actor and action role would, the Wachowski brothers felt, be more convincing to the film viewer. [Silver and Moss in "Making the Matrix"; The Matrix DVD] Neo's training, like the training of the actors, suggests one solution to the general problem of computer-induced disembodiment discussed earlier. [above p. x] No longer immobile at the computer, pouring ideas through the key pad, this hacker is learning how to hack with his body.

Neo's buff new kung-fu body represents the mysterious union of body and spirit that is the sine qua non of his metamorphosis into a hero. The hero—one of the oldest inventions of legend, myth and literature—is a figure who indulges the primary narcissism of the sympathetic viewer, a fantasy belief that through this person, the world becomes the extension of a jubilant and self-complete body.[footnote: See Freud, "On Naricissism" (1915); Jacques Lacan, "The Mirror Stage"] Thus, the hero is one who, by literary definition, magically reconciles inner spirit and outer appearance, mind and body. The Dojo scene allows us to follow the process by which Morpheus fashions Neo into a hero: in this space, the body is aestheticized, fetishized, and invested with spiritual coherence. However, the bad division between appearance and reality, which was minimized by the actors doing their own fighting, appears somewhere else. The effective visual force of the training scenes, and the incipient heroics of the hero, depend upon special effects--like running up a Dojo beam, Morpheus's huge leap, or Neo's failure in the jump program--which in their turn depend upon digital special effects techniques. Digital cinema gives photorealistic images the flexibility previously only associated with animation and these digital heroics enable Neo's heroics. [footnote: See Lev Manovich's fascinating discussion of the way computer based special effects allows main stream photorealistic film to utilize techniques which, for most of the history of film, have been associated with the

relatively peripheral genre of animation. (*Language of New Media*, 302) For a fuller discussion of Manovich, see my review essay of his book, Computable Culture and the Closure of the Media Paradigm," *Post-Modern Culture*, 12:3, May, 2002.] As developed by Hong Kong fight sequence director Wu-Ping, the ballet-like kung fu in this film is articulated with the idea of grace and freedom. In other words, characters who develop good kung-fu acquire the technique that Morpheus demonstrated in the history lesson--to summon the morphological powers of the cinematic apparatus. Neo's mission of salvation requires the assist of the new digital technologies of visualization. [footnote: Note that though the actors do their own fighting, each also has a stunt double, who is used in particularly dangerous of difficult shots: while Neo and Morpheus are dangling from the helicopter; when Neo is thrown into the newsstand. In the later stunt, Neo's stunt double was seriously injured. The authentic use of real bodies has its costs.]

Family Romance and the Autogenesis of the Superhero

The Thomas Anderson we meet at the beginning of the film is a modern cliché: the autonomous, deracinated, urban man. But by the time he is brought back into the Matrix, Neo is ready to acquire a history and be part of reality. This is not so because of the film's rather arbitrary location of "reality": on the Nebuchadnezzar navigating in old sewers beneath the scorched earth. Instead. Neo's participation in reality arises from his social insertion into the Nebuchadnezzar family, with its rich potential for identification, rivalry, and erotic attachment. Here, Morpheus is the elder brother and guide, the object of identification for Neo, and, within the film's Christian allegory, John the Baptist. Mopheus' mighty voice transmits the law of the Father, the rules for the hero-Christ's saving mission. Agent Smith is Morpheus' nonhuman counterpart and treacherous opponent. He has a beguiling style, the devil's fluency and charm and an uncertain sexuality. Supposedly no more than an "agent" of the machines. Agent Smith evidences an oddly personal attachment to Morpheus: he is honored to meet him ["Agent Smith: The great Morpheus...we meet at last." (Art, 352)] Agent Smith strokes the sweat off Morpheus's skull in disgust. But, Agent Smith's harangue against humans, his determination to crack the code of Morpheus's brain to know his most closely guarded secret, his questioning Morpheus alone, all imply an excess of desire, and thus some kind of subjectivity. Cypher is wily, smirking, always negative; and his name implies his ethical value (zero). He is the spurned son, the envious brother, the rival lover, and, within the Christian allegory, Judas. Trinity is the good sister, the beautiful daughter, and the one who at film's end saves Neo through faith and love. Within the Christian allegory, she is both the amorous Mary Magdalen and the virgin Mary (who holds and caresses Neo in death, in a visual rhyme with Michaelangelo's Pieta). [Footnote: For the way a grand world historical struggle is given an intimate, familial expression, *The Matrix* is most indebted to the *Star* Wars trilogy with which the Wachowski brothers grew up. The Wachowskis insist they are doing something darker, more serious and more intellectual than George Lukas, but there are many affiliations between the Star Wars trilogy, and

The Matrix. Not only is there an "evil empire" to fight, but a quartet of central characters—the hero who will lead the rebellion (Luke Skywalker), the father-like guide (Obi-Wan Kenobi), the slowly emerging love interest (Princess Leia), and the deadly antagonist (Darth Vader). But while the Star Wars trilogy makes its characters into a literal family—with Luke the son of Darth Vader and the brother of Princess Leia—and therefore introduces a friendly rival for Luke and a romantic interest for Princess Leah in the person of Han Solo, and his side-kick Chewbacca, *The Matrix* keeps its "family" a figurative one, and long-term affiliations uncertain.}

It takes Neo a long time to grasp the family romance into which he has been inserted. Neo fails to recognize Cypher as a threat, and Neo shows the young action hero's reticence about love and sexuality. Although Trinity draws Neo to her with the mysterious knowledge she has about him (at the club), and Trinity's love for Neo is obvious to Cypher and the Oracle, Neo only "wakes" up to his own love for Trinity after he receives her saving kiss. [Image: kiss] Why does it take so long for Neo to assume the role his has been given? Like Virgil's Aeneus, and like the Biblical Christ, Neo is characterless by design. Keanu Reeve's famously wooden acting style, the difficulty of knowing exactly what Neo is feeling; his slightly mannered speech; his emotional reticence; in short, his lack of "character" allows Neo to be passive, bewildered, "ordinary guy" the film action makes him. If Neo's responses bore the stamp of personality, if his subjectivity could be read from behind his handsome face, then it would be more difficult for Neo to function as a suture point for identification by the general film viewer. [footnote: See Kaja Silverman, "Suture", in Rosen, Phil. A Film Theory Reader: narrative, Apparatus, Ideology. New York: Columbia UP, 1986, 219-237.] However here the identification achieved is a particularly weak one: we don't want to be Neo/ Reeves, but we can identify with what he does.

It takes a Black grandmother, who bakes cookies and dispenses philosophy to live by, to prepare Neo for assuming his exalted role. We've noted that the film invites its hero (and viewer) to grapple with certain philosophical problems: the epistemological paradox about the chasm between dream and reality, and the ethical paradox about fate versus free will. The film makes these paradoxes the topics of somber sophomoric dialogue, a way to imbue its story with sublime significance. But these paradoxes are finally presented as irresolvable. Instead they are something the hero must—like Alexander's Gordian knot—cut through with personal action. This reduction of abstract philosophy to pop self-help becomes most evident when Morpheus takes Neo to visit the "Oracle." The Oracle is not presented as a Delphic point of contact with obscure Divine forces; she is as warm, folksy, and knowing as Oprah Winfrey. Her lesson is the modest starting point for talk show therapies: know thyself. The blackness of the Oracle is not just the result of camp good fun. As is the case with innumerable amiable and supportive characters of color scattered through the long history of Western action adventure fiction—from Friday to Chingachgook to Huck Finn's Jim, to Tonto—the color of the servant/side-kick/guide allow these characters to serve as the indispensable prop to the White Western hero. The Oracle links but does not bind Neo to the obscure forces of nature, history.

destiny. Along with Morpheus, the Oracle serves as the "good" matrix for the new man, where Neo's self-improvement becomes the universal solvent ion for the film's big, and ultimately irresolvable questions. If the Matrix locks humans in a technological womb of fate, the Oracle sets Neo free to choose, to act, and to self-improve. [footnote: While the Christian allegory is used with an almost camp overtness, the favorite book of the Wachowski brothers, Homer's *Odyssey*, and *Alice in Wonderland* are more precise models for the film's episodic series of encounters between Neo and a succession of would-be instructors and advice givers: Mr. Rhineheart, Agent Smith, Trinity, Morpheus, Cypher and the Oracle. In an interview, Larry Wachowski insists that Neo must finally turn away from all these advisors, so he can decide for himself.

Neo changes the direction of the action and accedes to the status of a hero when he decides to reenter the Matrix to save Morpheus. The dramatic power of the moment comes from its contrast with most of the film.[footnote: This moment of the film resembles the shift in Hamlet evident in act V, when he returns to Elsinore without the doubt and hesitation that had dogged him throughout most of the play.] Neo has been passive, reactive, and a compliant learner. Nothing seems to stir his passion. But then, a moment for decision arrives. Tank is about to "unplug" Morpheus, in order to protect the codes to the Zion mainframe from the brain cracking Morpheus is undergoing within the Matrix at the hands of the agents. Tank addresses Morpheus's body with words that have a eulogistic character: "you're more than a leader to us, you're...a father." At this moment. Neo takes action into his own hands with uncharacteristic decision. by making use of the Oracle's prediction, without telling Trinity and Tank its exact content. The Oracle had told Neo, "You're going to have to make a choice. In one hand, you'll have Morpheus' life...and in the other hand, you'll have your own. One of you is going to die...which one...will be up to you..." (Art,) By reading this moment as a fulfillment of the Oracle's words, Neo can prevent the unplugging of Morpheus and assign himself a mission: to sacrifice himself to save the father, his father, and the leader of the resistance. [Oracle to Neo: "Without him, we are lost.." (Art. 343)] [footnote: Saving Morpheus climaxes with the arms extended leap from the helicopter to rescue the wounded Morpheus. During filming this shot was called the "I love you shot."] Neo wins Trinity's acceptance of his decision by invoking the uncanny coincidence of this moment and the Oracle's prediction, but obscuring the fact that his mission implies his own death. This pivotal scene of the film suggests the Wachowski brothers' recipe for translating an ordinary guy into a super hero: accepting higher authority; sacrificing one's self for others; taking responsibility for the course of the action by acting with decision. This is the self-improving ethos through which the film resolves a paradox around Neo's status: although he is not destined to be superhero, and neither the Oracle nor Morpheus make him one, through the right combination of disciplined self sacrifice, personal choice, and action, Neo makes himself a superhero.

Taking Action/ Playing Games

When the film's plot takes Neo and the viewer back into the Matrix, the Matrix has undergone decay. On the drive to see the Oracle, Neo looks out the window at a familiar world, locations of past experience that are not really "there," and shares with Trinity the oddness of this new way of seeing. [Neo: "I have these memories from my life...none of them happened. What does that mean? Trinity: That the Matrix cannot tell you who you are." Art,] Before beginning his interrogation of Morpheus, Agent Smith savors a view of the Matrix from an upper floor of the government building and asks Morpheus, "Have you ever stood and...stared at it? _marveled_ at its beauty?" (Art,) In both scenes, we are being invited to see the Matrix world—rendered up to now in the conventional photorealistic techniques of late 20th century cinema—as an aesthetic totality. The Wachowski brothers promoted this effect by using older film technology to weaken the 3-D illusion of 2-D film: they used back-screen projection technology to render the street scenes from the car and a huge "translight" screen panorama of Sidney for scenes shot from the government building. [The Matrix DVD and "The Matrix Revisited" This "de-realization" of the Matrix gives the film viewer visual cues that Neo's old world is an arbitrary construction of the machines. But this de-realization of the Matrix also prepares it to become a new kind of space in the last third of the film—a space for action, game playing, and, within the filmmaking allegory, a surpassing of the constraints of earlier action films.

The Matrix gives its viewer the vicarious pleasure of being a superhero by modeling the Morpheus rescue mission on a video game. Although cinema cannot achieve the direct player participation and interactivity most characteristic of video games, here the realistic conventions of film (plausibility and verisimilitude) are bent toward the cardinal elements of the video game: highly repetitive rapid fire action; violence that is hyperbolic, stylized, rendered in closeup, and, occasionally comic in its extremity; and a naïve identification with the hero, who serves as the avatar of the player with the joy stick. [footnote: In a lecture at a USC Annenberg School conference on interactive media, Martha Kinder described the way games have come to reconfigure many of the films of the last two decades. See also her Playing With Power in Movies, Television, and Video Games: From Muppet Babies to Teenage Mutant Ninja Turtles. Berkeley: University of California Press, 1993.] In this game-like sequence of scenes, the two players. Neo and Trinity, start the way many players begin a game, by making their choice of weapons [Neo to Tank from the Construct: "Guns, lots of guns" (Art, 368)], Armed, they enter successive environments. each with a distinct challenge, and as they win, they rise through levels of increasing difficulty.

In fashioning these scenes the Wachowski brothers borrowed many visual and diagetic elements from gaming.

Level 1: Government building lobby: Neo and Trinity take on police guards and ordinary troops, in the mode of a first person shoot'em up game, like the classic *Doom*. Particular game elements are used to render this scene: players and opponents hiding behind pillars; dropping guns when out of ammo (*Syphon Filter, Halo*); players making acrobatic moves to avoid fire; picking up the weapons of

opponents; running sideways and shooting at the same time; and finally, the shots steadily degrading the play environment in highly visible ways.

Transition "cinematic": while play within each level features the first person point of view of the game player, the intervals between levels of a game are often marked with a "cinematic", where a video game imitates the grandeur and narrative coherence of film, by establishing the setting and opponents for the next level. The Wachowski brothers' film style at these moments—ponderous music, a monumental set, and a situation full of portent—imitates video games

imitating film. Here, in the cinematic between levels, Neo and Trinity escape up the elevator shaft as they detonate a huge explosion in the government lobby. [Image: Neo and Trinity in embrace around elevator cable.]

Level 2: Government Roof: Often at the end of a fighting sequence, the toughest opponent steps out to confront the player. Known generically as "the boss", he often cannot be killed, but only wounded. In



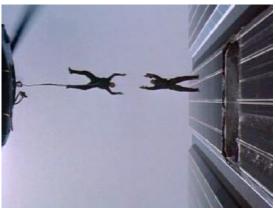
Sonic The Hedgehog, for example, Dr. Robotnic appears on the top of the dangerous robots he builds. You must hit him directly to disable him, but he reappears at every level. Thus on the government roof, Neo and Trinity quickly dispense with the troops, but Agent Brown appears to dodge Neo's bullets and require Neo to do the same. Only Trinity can save Neo by getting the drop on Agent Brown: "Dodge this!" [IMAGE: shooting Agent Brown].

Level 3: Saving Morpheus from 3 Agents: In certain arcade games, two players can assume the role of driver and shooter, as Trinity and Neo do when they pick up a big new weapon (the V-212-Heliocopter) and then fly to the interrogation room to rescue Morpheus. Neo's challenge here—how to shoot enough bullets into the interrogation room to disable all 3 agents and do no harm to Morpheus—would be given explicit expression in a video game: "Additional objective: Morpheus must survive." [The red fuel that bleeds from Trinity's failing helicopter gives new meaning to the video game's "machine health" meter.]

Level 4: the climax of the action sequence comes after Neo saves first Morpheus and then Trinity, and then "telecommutes" them both back to the Neb. Neo is alone in the subway station, with no exit possible, and rather than fleeing, he turns to fight Agent Smith. [Trinity: What is he doing?! Morpheus half-smiles to himself. Morpheus: He's beginning to believe... (*Art*, 381)] In this scene Neo shows off the stuff he has learned in the Construct training scenes, as Neo and Smith move from a gun duel to a Western style fist fight augmented with Kung-fu. The scene begins with an explicit, tongue-in-cheek invocation of the Western duel on Main Street (with papers blown by the breeze the only movement in the long shot taken from low behind the back of Neo). But its strongest indebtedness is to the "one-v-one" video games like *Mortal Kombat*, *Dead or Alive*, or *Virtual Fighter Four*. These games feature several motifs: opponents prepare to fight with a "cool" opening flourish (like Neo's S-shaped contortion: IMAGE); kicks and

punches modify the environment; you can get up and kick your opponent at the same time; you can turn on "extra-gore" if you want to see lots of blood; "finishing moves" like the blur of fists Agent Smith lands on Neo; and a closing cinematic that indicates who has won (here, Neo wins, but Agent Smith returns unscathed, so Neo must flee through the streets).[footnote: For understanding the to many connections between gaming and the action sequences in *The Matrix*, I am in debt to my 14 year old son Andrew Warner, and his best friend Alex Bozer, who have spent years learning the games I've referred to here. For those in the film audience who have spent years gaming within the virtual environments, *The Matrix* delivers a special treat: its photo realistic vividness, human actors and special effects seem to "realize" action they had only experienced in relatively crude, low resolution computer graphics. Thanks as well to Michael Perry (English/ UCSB) and Robert Nideffer (UCI) for first pointing out the centrality of gaming to this film.]

The art of such a sequence of game levels comes from pacing the action so they provide distinct and interesting environments, a variety of situations, and a steady build-up in intensity. In the process, adolescent fantasies of hypermasculine feats are readily indulged. In their Commentary on the Matrix DVD, Zach and John Gaeta make explicit the Wachowski's aesthetic goal: to outdo other films, and surprise their viewer, by piling on ever more intense action scenes. Here the slightest arabesque of dialogue supports the action sequences: Agent Jones: "I think they're trying to save you."... Neo: "There is no spoon." ...Trinity: Dodge this!"....Neo: "He's not going to make it! ...Gotcha!" Morpheus: "Do you believe it now, Trinity?" Throughout the action, the superhero assumes postures that acquire iconic force and tell a kind of "story within the fight": Neo and Trinity interlocked around the elevator cable suggests their erotic entanglement; Neo leaping off the helicopter to save Morpheus in the "I love you" shot suggests he assumes his debt to the Father by saving him; and Neo's super-human rescue of Trinity from the inferno of the crashing helicopter suggests that he is, in fact, "the One". 3 IMAGES But what allows these scenes to achieve the expressive power of games and comics is the visual effects technology called "bullet-time."





Surpassing Photorealistic Cinema: The Triumph of Bullet Time

From the first reviews to the Academy awards, *The Matrix* garnered special attention for the innovative slow motion technology used in its climactic action sequences, a digital special effects technology the Wachowski brothers dubbed "bullet-time." What is bullet time and how is it made to mean in The Matrix? Bullet time is used sparingly at moments of climatic action: when Trinity coils to give her gigantic kick in the film's opening sequence; when Neo dodges bullets; when Morpheus is running from his interrogation chair; and finally, when Neo duels with Agent Smith in the subway station. This technology gives photorealistic film the proximity to action first imagined in comics and video games. The person responsible for "bullet-time", visual effects supervisor John Gaeta, has addressed the question of bullet time's significance with incisiveness and eloquence. In interviews granted during the release of the film, in commentary on the Matrix DVD and "The Matrix Revisited," and in a short text written to support the nomination for the Academy of Motion Pictures Award that he won, Gaeta stands forth as the inventor of a "revolutionary" special effects technology, and tells a story to back up that claim. In Gaeta's narrative, bullet time has its origin in a request from the directors: "Larry and Andy told me, 'Our movie is about the complete manipulation of time and space in a simulated world. We need you to come up with a method of manipulating time so the camera can be moving while all of the high-speed stunt action is happening." (Magid. American Cinematography, 50) Neither here nor in his other commentary does Gaeta seem to note the irony that the specific visual effects request made here find us a way to have the camera move while it captures the object moving at high speed—is aligned with the grandiose premise of the Matrix simulation— "complete manipulation of time and space." In other words, the Wachowki brothers have requested that John Gaeta build a machine that can manipulate their objects (actors performing at high-speed) in the "complete" sort of way that the machines within The Matrix do. [Footnote: Wachowski brothers playfully claim copyright to the term "bullet-time" in the "Making the Matrix" documentary; and in one documentary, on *The Matrix Revisited*, they pay tribute to John Gaeta by using the words, "Enter the Gaeta, the Gaeta force."]

Gaeta and the special effects company Manex VFX built a remarkable machine to achieve the effect Gaeta defines in this way: "3-D all around capture of the subject in a realistic space, at varying speeds, with graceful camera movement." [footnote: This is the way Gaeta describes the challenge he confronted in explaining bullet time to the Academy of Motion Pictures. Chuck Wagner, in the "Hot Shots" column, in "Future of Filmmaking," explain that previous special effects freeze the image and move around it, but the Matrix "takes that one step further by allowing the action to continue in slow motion as the camera moves—a very tricky stunt to pull off—something the Wachowski brothers call 'bullet time.' As Larry Wachowski explains, 'We like slow motion, but we like to move the camera a lot, and you can't move the camera [while shooting] in slow motion, unless you move the camera super fast." Mass Illusion

Inow Manex VFXI came to the rescue with software the company created that emulates camera movements in the computer. They believed that with some money and some research they could create a system with which we could move the camera around as much as we wanted, and shoot at camera rates of something like 1,000 frames a second." For Gaeta's sophisticated discussion of bullet time I have drawn on Ron Magid's article, "Techno Babel," published in American Cinematography; the document submitted by Gaeta to the Academy of Motion Pictures to support his nomination for an academy award and available only at that archive; "The Matrix for your consideration" A Warner Bros release document; and the various documentaries on *The Matrix* DVD and *The Matrix* Revisited DVD. See especially, "What is Bullet Time?"; "Commentary" (both found on *The Matrix* DVD) and "The Making of the Matrix" and "There's More" (both found on The Matrix Revisited)] The bullet time rig consists of 120 still cameras, arranged in a circular array, controlled by computer, and supplemented by two motion picture cameras. [IMAGE: bullet-time rig: American Cinematography, 481 This "rig" can capture a movement at its center—for example, Neo falling while he dodges bullets—by firing all 120 still cameras in a controlled sequence within one interval of between .333 to 2.0 seconds long. (American Cinematography, 52) Then this film undergoes the double translation always necessary for digital special effects. The processed film images are digitized and then subject to various forms of computer manipulation: between the actually captured images there is an interpolation of thousands of images necessary to create the illusion that a camera is moving around the object in one smooth and continuous motion; this digital capture of the central object is then blended with complementary digitized images (like the background, other actors, etc.) to produce a "scene." At the end of the process, all these digital images are translated back into celluloid film that can be shown in theaters at 24 frames per second.

What is the effect of bullet time? Throughout the history of cinema, moving the viewer's camera eye view of the object—whether through zoom or reverse zoom, through tracking shots or dolly shots, through hand-held cameras, or by putting cameras in moving vehicles of every sort—intensifies and varies the viewer's experience of the moving object. As media critic Lev Manovich has shown, what we often call "motion pictures" or "the movies" are most essentially a technology for capturing and representing motion. [Manovich, Language, 296-308 I In Gaeta's radical formulation, bullet time extends this project by allowing for the constitution of a "virtual camera," freed from the time and space constraints of a camera bound to the object within the time and space continuum we know. Because that virtual camera's position is constituted out of software, it can produce a compelling new relationship between object, camera, and film viewer. Thus, in bullet time, the virtual camera can take the viewer on a fast 360 degree arc around the object so the viewer has visual access to an object moving too fast to "really" see, because it is happening as fast as a speeding bullet. This visual capture of speed is given explicit iconographic statement when we see the bullets from guns flying past their targets. [IMAGE—with bullets flying near the arched back Neo on the government roof

Neo's quest for freedom from the machines is energized by the correspondence between what the hero achieves—hacking the Matrix to fight at bullet time speed—and what the creative artists behind the film (the Wachowski brothers and Gaeta) achieve—hacking the limitations of photorealistic cinema to film in bullet time. Through bullet-time, Neo emerges as a hero in and of motion:



motion expresses freedom, but it is a freedom grounded in control. John Gaeta explains how this special effect subordinates itself to the conceptual work of the film in this way: bullet time "moments signify that the character Neo is actualizing his mind over matter control of the Matrix simulation." Since 'Mind over matter control of a simulation' is not a bad definition of the project of cinema, Neo can embody the filmmakers' heroic achievement in surpassing the limiting conventions of earlier action adventure films.

Throughout his commentary on the film and bullet time, John Gaeta gives expression to the two sides of Neo's role—destroyer of an old order and founder of a new one. When he discusses the potential of bullet time technology, Gaeta speaks as a revolutionary founder. At these moments he sounds like many other techno-enthusiastic geeks of the 1990s information revolution showing off (and

selling) the next new thing. Thus, for example, Gaeta tells one interviewer that digital technology makes *The Matrix* a particularly interesting project, "because the scenes that depict virtual reality were created using the techniques that I think are going to be at the core of virtual reality." (American Cin, 48) But Gaeta is also a bad-boy and iconoclast. In the commentary he offers for the film on The Matrix DVD, Gaeta interprets the elegant visual deformation of the Warner Brothers and The Village Roadshow logos we are watching with these loaded words:



My name is John Gaeta. I did the visual effects on *The Matrix*. The opening [of the film] was important in that we wanted to alter the logos of the studios, mostly because we felt that they were an evil empire, bent on breaking the creative juices of the average director or writer. So we felt that desecrating the studio symbols was an important message to the audience that we basically reject the system.

While these words might be taken as intentionally ironic—we can hear the nervous laugher of Carrie-Ann Moss (Trinity) and film editor Zach Staenberg, (editor) on the sound track—these words are of a piece with one of the film's central movement: Neo is learning to reject the huge system that sustains,

comprehends and enslaves him. For Gaeta, what should be destroyed is the system of financing and production dubbed "Hollywood," as well as the confining photo-realistic conventions of traditional cinema. Gaeta makes undoing the system that you use and hack explicit in a moment from a documentary segment on The Matrix Revisited. When the camera turns toward Gaeta, he impishly flashes open his coat so we can see, in large-cap white letters on a black tee shirt, the words, "DESTROY HOLLYWOOD" [footnote: "Wait There's More" section. In describing the film's use of special effects, producer Joel Silver describes how the standard special effects houses did not see how to achieve the effects the Wachowski brothers wanted. He notes that John Gaeta came from "outside" those established houses, like Industrial Light and Magic, Pixar, etc. Gaeta carefully cultivates the posture of outsider, but one who is also at the vanguard of a revolution in special effects. Gaeta's caustic tone through much of the Commentary section of the Matrix DVD, and his obvious distain for many of the earnest comments of the editor Zach Staedberg, mar the Commentary. Gaeta has the zeal, irony, and contempt of the passionate creator of the new. The final statements of the three commentators, at film's end, are characteristic. Carrie Ann-Moss offers her role as a gift to the film viewer, "Making the Matrix took a year of my life. I hope you enjoy it." Editor Zach Staedberg embraces the pleasure of his craft "Seldom do you get to do your craft and have so much fun." Eschewing the sentimental closure that moment seems to calls for, John Gaeta says "Movies suck; I hate movies." Gaeta here evinces the anger of the bad boy creative purist who cares too much.]

The loaded words John Gaeta uses to characterize the film's opening visual effects—to "desecrate" the studio "symbols"—give a quasi-religious dimension to his act of destruction. The destruction is ironic because, after all, Gaeta and the Wachowskis create a new visual style and technique which Warner brothers markets and distributes with great gusto. However, Gaeta's iconoclastic posture helps to explain why, at the climactic moment of the movie, Neo's victory comes through a moment of smashing. All of Neo's training does not enable him to do better than achieve a "draw" with Agent Smith. But after Neo dies and is reborn, he has won a masterful new relationship to the Matrix simulation, expressed cinematically by his vision of the three Agents in green computer code. [IMAGE: 3 agents rendered in green code] Neo's exteriority to the basic physical laws of the Matrix system is evidenced by his stopping the bullets fired toward him, picking one out of the air, dropping it to the ground, and then fighting the enraged Agent Smith with one hand. However, the decisive moment in the long battle with the Agents comes when Neo makes a move outside of the lexicon of gun fights, fist fights or kung-fu: he runs and leaps into the chest of Agent Smith. Neo's action evades a law of physics usually observed in even the most fanciful superhero fictions—the law of the conservation of matter. However, the move is coherent from within the software premise of the Matrix simulation. If the agents are nothing more than "sentient programs", then Neo can hack into them and make them crash. This idea is expressed visually when we see Agent Smith's skin boil, swell, and finally explode into fragments. Now the cinematic space of the film, which was the object of anxiety-engendering dissolution in the extraction scene, becomes a medium for triumphant surpassing: the film viewer experiences the 3-D illusion of cinema cracking into 2-D parts. Agent Smith's explosion into bright fragments, edged in bright white

and green, briefly reveals the white light of projection behind the opaque images on a movie screen. Neo's surpassing of the Matrix is expressed through a momentary smashing of the cinematic space. His victory in this scene is conveyed through comic understatement: Agent Brown and Agent Jones take one long look at the triumphant Neo, and flee.



What lies beyond the

confining systems of the Matrix or the photorealistic conventions of action cinema? Sublime unboundedness and unimagined freedom. The film gives a rather hokey expression to these ideas in its "finale," when Neo describes this bold new world to the machines, and then flies past the camera like a super-hero, "faster than a speeding bullet." [This is the script's tongue in cheek echo of Superman, (Art, 394)] Throughout this speech, Neo defies and mocks the enslavers of humanity, but he also expresses the bold new freedom of film makers working within a "digital universe" (of either the Matrix or digital cinema), where, Larry Wachowski finds "you can really push the boundaries of what may be humanly and visually possible." (Probst, American Cinematorgrapy, 33). Neo's address to the machines is also the Wachowski brothers' address to the surpassed system of conventional cinema.

I know you're out there...I can feel you now. I know that you're afraid. You're afraid of us, you're afraid of change...I don't know the future...I didn't come here to tell you how this is going to end, I came here to tell you how this is going to begin. Now, I'm going to hang up this phone, and I'm going to show these people what you don't want them to see. I'm going to show them a world without you...a world without rules and controls, without borders or boundaries. A world...where anything is possible. Where we go from there is a choice I leave to you. [the last sentence is added to the script text during filming]

Neo's extravagant testament to human freedom thus serves as the Wachowski brothers' testament to digital cinema: both the hero and the film makers frighten those "afraid of change" and both are going to exercise their power by "showing these people" something new, a digital world "without rules and controls, without borders or boundaries." In addition, for both Neo and the film makers this is not an ending, but a place to "begin," an opening of a situational and aesthetic space for the next two parts of the trilogy, where we will find out "how this is going to end." The last sentence in the speech, added during filming, involves a slippage

of pronouns: the "you" is no longer the machines, but the "people" shown a world without borders or boundaries; the choice the people make will determine where "we", the community that includes the people and the Neb liberators, will go. But this sentence also implicitly addresses the fans. Without their popular support, this film will be no beginning, and there will be no Matrix 2 and 3, where we find out how things "end."

Neo Rising: "Now get up!"

The film's final image of Neo's flight offers a robust alternative to the image of the recumbent body, attached to the network, described at the start of this article. [IMAGE see above p.1] With Neo's speech in the film's finale, the film makers lay claim to the extravagant autonomy of the superhero. But a contradiction haunts this moment of flight. Neo can only express his radical freedom through flight within the Matrix simulation, and the Wachowski brothers can only marshal the special effects technology to support Neo's feats, through recourse to the special effects system invented by John Gaeta's team of digital technologists. How do the Wachowski brothers overcome the tension embedded in the fictional premise and actual production of this film—the antagonism between the individual who would be free and his dependency upon the advanced digital systems which enable him to fly? [Footnote: Cliff Siskin has written on the emergence of the idea of the system in the 18th century, a term used to describe explanatory systems, but subsequently extended to describe social and political systems. In the 20th century, computer sciencists use the word "system" to describe basic hardware and software platforms upon which code and data is written. Digital technologies seem to have intensified the antagonism and co-dependence of individual and system.] Like the other paradoxes of the film, the antagonism and co-dependence of the individual and the system does not admit of conceptual resolution. Instead, the story offers a symbolic resolution through myth to the dilemmas with which we ordinary viewers must continue to live. At the center of this mythmaking, as we have seen, is the story of the emergence of Neo as the "new man", the hacker super-hero, to whom the narrative delegates an arduous task of liberation. So, as we have shown earlier. by hacking the Matrix with kung-fu, Neo offers a symbolic resolution of the mind/body split given sinister expression by the Matrix premise, but also opened by the rather complexly mediated digital technology we all inhabit. [See above, page .] Placed within a perilous but alluring network of humans and nonhumans, Neo is designated as the One who, because he can face and accept death, summons the power to do what "we" could never do: smash "the system" and achieve some kind of radical freedom. In order to achieve this symbolic resolution, the Wachowski brothers overlay the myth of the hacker-superhero with two other myths, one political and one religious, one American and one Christian.

According to the founding myth of the American nation, America won her freedom from the British imperial system by doing what the Neb crew is doing: banding together to fight a system that enslaves them. From the American Revolution to *Star Wars*, revolution in the name of freedom offers a still resonant

ideological rationale for righteous violence and republican self-sacrifice. Thus, the end of *The Matrix* echoes the most sublime rhetorical moment of the American Revolution. Neo's last speech, in its defiance of authority, in its decisive break with the Matrix, echoes the declaration adopted on July 4, 1776, when the American rebels performed their freedom, by declaring independence. Like Neo's heroic act, this moment of political liberation requires action, delegation, and an uprising. First, the revolutionary moment is fraught with the same mystification of decisive action we find in *The Matrix*: here the founders don't just describe a condition of independence from Britain, they perform it. [footnote: On the Declaration of Independence as having the performative power to make itself true, see Jay Fliegelman, Declaring Independence, and Jacques Derrida, "Declarations of Independence."] Secondly, while the Declaration of 1776 enunciates certain foundational political principles (life, liberty, equality). makes a pledge (of "sacred honor") and affixes signatures, what gives the document its effective force is a prior process of delegation, by which this "Congress" can plausibly be the "one" to represent a plurality, "these United States of America." Finally, both acts of rebellion take the form of a rising, an uprising, against instituted authorities. To carry out its act of rebellion, the American founders must do what Trinity orders Neo to do after he comes back to life, "Now get up!" Get up, get it up, summon your powers, and fight. Rising up performs a symbolic solution to the central image of the film's first half: the recumbent, body ensnared in the network.

What justifies this film's most audacious extension of myth, the articulation of Neo's triumph and flight with the powers of the risen Christ? How, after selfsacrifice, death and rebirth, can Neo become the Christ-like savior, the "new" man promised by Christian eschatology? Because the crew led by Morpheus has a conscious understanding of their oppression, they can assume the role of freedom fighters for humanity. But the Matrix premise poses a more radical problem: how do you free people who don't know they are enslaved? This takes another, more comprehensive form of delegation. It requires a hero, a superhero, who can take on the task of dying to the delusional life in the Matrix simulation, so as to be reborn in reality ("welcome to the real world.") This helps justify the extravagant, even outlandish character of the Wachowski brothers' mythography in *The Matrix*. The hero Neo is not just the usual "Christ figure" that is traced through numberless literary texts in high school and college English class, where begin a Christ figure just means you suffer, and suffer for others. As critics quickly noted, Neo's story repeats several stages in the progress of Jesus of Nazareth—summoning by John the Baptist/ Morpheus; betrayal by Judas/ Cypher; self-sacrifice and death; and a miraculous rising from the dead, which marks the ultimate triumph of the risen Christ. Only by going through life, death and rebirth can Neo break the code of the Matrix, and break through to the borderless freedom on the other side. The strongest mythical analogy our culture has to this kind of transcending of limits is the death of Jesus as a man and his resurrection as Christ. The name Neo denotes the "new" man promised by the New Testament of Christianity; but, as everyone has noticed, "neo" is also an anagram for "one." and Neo is cast by Morpheus as the single person set apart

by fate from all other humans to save humanity. Only as Christ, can Neo offer those who will believe in him, and identify with him, a flight across the chasm separating the Matrix simulation and "reality," a distance as great as that between Earth and Heaven. Through the figure of "Neo"—as new technology and as the One—the Wachowski brothers seek to articulate the magical metamorphisizing power of digital technology with the mysterious rebirth of the superhero, Christ.

Postscript: Building Community

"There is a fan fiction that a friend of ours on the board [of the Matrix fan club]

has written that surmises that there is actually someone viewing us (in space or somewhere) who actually gave the brothers the idea to make The Matrix, so we would be aware of the



fact that we are all still our pod s." Kira Inte

rnet fan [The Matrix Revisited?]

Many no doubt find the Wachowski brothers' inflation of the hero—through its condensation of several hero myths with special effects technology—to be ludicrous, fanciful, or perhaps even heretical. This inflation is part of their program for elevating the s/f action adventure movie, by giving it intellectual rigor and a moral purpose. Nonetheless, it courts a particular danger. The more transcendent the hero, the more radical his freedom from ordinary human constraints, and the more destructively anti-social his violence becomes, the more difficult it is to bring him back to the community on whose behalf he has been delegated to act. To contain the heroic violence of Neo, and direct it to the

in

ends of the community, the penultimate scene of the movie activates the latent romantic tension between Trinity and Neo. Throughout the scene of Neo's final victory over Agent Smith, Trinity holds Neo's body, caresses his face, and kisses his lips.



[IMAGE] Doubling as the Virgin Mary who holds the Savior in the Pieta and Mary Magdalene who anoints his body at the Crucifixion, Trinity's love has the power to bring Neo back from the dead. After he has smashed Agent Smith, and the Sentinels have breeched the hull of the Neb, Trinity calls him back to the Neb community with the words, "Hurry Neo." Even the testament to absolute freedom proclaimed by Neo to the machines in the film's "finale" is given a collective moral purpose: to liberate "these people" from the Matrix illusion.

The Matrix leaves the viewer with very familiar values: reciprocal faith,

collective action, courage and community. Given the film's emphasis upon the value of community, it is appropriate that the film's official Warner brothers' site,

"Whatisthematrix.com," is shaped to allow the visitor to the site to become "part" of the Matrix "community." The site's interface is designed to resemble the control room of Nebuchadnezzar and thereby indulges the fan's desire to become a member of the crew. [IMAGE] By



exploring the content of each screen, one finds many of the standard items found on Hollywood fan sites: trailers; posters; still images from the film; still images from the film's making. [IMAGE: DVD extras] [Footnote: On the Matrix DVD documentary, producer Joel Silver points out that this website offers much more than the promotional movie site. This additional layer of content includes: a Matrix audio/video archive, featuring audio clips about making the film as well as trailers; an arcade game based on the Matrix lobby shootout, where you play as Neo or Trinity; 3D zoom around the "new main deck" for Matrix RELOADED; the archives of on-line chat events (fan Q&A with Andy and Larry Wachowski, etc.); a downloadable screen saver, so you can make your computer screen resemble those on the Neb; "The Matrix Comics", a series of comics, commissioned by the studio for free distribution on this web site, that extend the premise of The Matrix; a series of Animatrix (coming in 2002), which will do the same thing as the comics, but in the Japanese *anime* genre.]

This site is more than a publicity vehicle and play space for the fans of *The Matrix*. Whatisthematrix.com, as its name implies, is designed to draw the fan into a community around the game of interpreting the Matrix. Because of the non-visibility of the machines that created the Matrix—we only know them through their Agents and the Sentinels—an accommodating space for exploring the mysteries of *The Matrix* invites each fan into a web-based "community" linked by this common interest. This strategy is made explicit in describing "The Matrix Comics":

"The Matrix is not an easy film to explain. Beneath a story of unexpected complexity, it is, at its core, a film of ideas and it is those ideas that have inspired this project: a collection of stories set in the world of the Matrix. [IMAGE] The stories stand alone. They are not adaptations. The contributors are some of the most talented artist and writers working in the

comics medium today." ["Mainframe" part of the website, Whatisthematrix.com]

Here, the "serious" intellectual claims—The Matrix is "a film of ideas"—is articulated with the autonomy of excellent creative artists working in the comics medium. The comics reflect on questions implied by the Matrix premise: for example, what is it like for a female hacker who chooses the blue pill, and thereby refuses the one chance in her life for adventure and purpose? How does one experience the boredom of life in the Matrix, where excitement only comes from the violence of freedom fighters who appear as terrorists? [Footnote: The high aesthetic claims for comics and *The Matrix* is given explicit expression in The Art of the Matrix, a lavish \$70 book produced by Time-Warner Books and published in 2000. The 488, glossy, big format book includes many pages of the original Matrix comic book/ story boards (by Steve Skroce and Tani Kunitake). conceptual drawings by Geof Darrow, commentary by these artists in relation to each image, studio stills from the shooting of the film, and a complete script of The Matrix (dated, August 12, 1998)] The official fan club of The Matrix has carried their speculations about the Matrix onto more radical ground. What if the Brothers film is based on privileged communication from outer space, and the film is an indirect way to make us "aware of the fact that we are all still in our pods." Kira, Internet fan. [footnote on sequels: From what is already known about the next two parts of The Matrix Trilogy, it is a fairly educated guess that the building of a new human community will offer the ethical telos for the whole trilogy. So here is my surmise about what will come. The story of the "rebirth" of the hero, in *The Matrix*, will achieve its retroactive rationale from the liberation of humanity from the machines. Matrix Reloaded will undoubtedly entail the recruitment of new members for the depleted Neb team, possible alliances with other hovercraft, and the launching of a full scale war against the Agents controlling the Matrix. The introduction of a wife for Morpheus will mean a muting of the homoerotic bond between Morpheus and Neo on the one hand, and Morpheus and the Agents on the other. Neo and Trinity love will develop, and will no double entail the "more kissing" that Carrie Ann Moss hoped for in here commentary on the Matrix DVD. Matrix Revolutions will carry the struggle with the machines to climax, and it will directly involve Zion, "the last human city." Keanu Reeves' comment that the trilogy is organized to move through the arc "birth", "life," and "death" suggests that the trilogy will engage the generic logic of

tragedy. The tragic hero, has "had an extraordinary, often a nearly divine, destiny almost within his grasp" and his death provides a "vision...that draws the survivors into a new unity," a new sense of community. (Frye, *Anatomy*, 210, 215)]

Are the Wachowski brothers successfully using the popularity of a big budget Hollywood film to develop a web-based fan community that is has



the character—horizontal, participatory, egalitarian, and "sharing"—associated with Internet culture? Does this web-based community give us access to some of the freedom of the network hackers within the film, the kind explicitly embraced by the Napster on-line community for sharing MP3 files? Or is Warner Brothers cynically exploiting the ethos of sharing from the web to sell books and DVD and build the film's buzz in preparation for the sequels. The answer I think is both. Each side uses the other, so that profit motives frequently in evidence can be brought into balance with the utopian ethos of sharing more proper to the early Internet.

Conclusion; in which Nothing is Concluded

In this article I've sought to demonstrate the many ways *The Matrix* allegorizes its own production. Of course, there is nothing very new in this: countless works of literature and film do the same. What gives this self-reflective turn popular resonance is the way it enables The Matrix to explore the personal implications of the new technologies for digitizing culture. In the late 1990s. countless practices within our culture--from architectural design to distance learning to stock trading, from the democratic mobilization to music distribution, from digital arts to the cinematic special effects--were challenged by the radical implications of the digital mutation. If, to take an example from architecture, computer based design can control the fabrication of the most basic building components, why shouldn't architectural design extend back to those building elements, so as to conceive buildings unthinkable using traditional building elements (like the post, the lintel and the arch)? (Mitchell, W. J. City of Bits Space, Place and the Infobahn, Cambridge: MITPress, (1996).) Or to take an example more pertinent to *The Matrix*, if music tracks are now sold in digital form. and if those tracks can be converted to the .mp3 file format and transmitted over the Internet, and further, computer users have evidenced a zeal for remixing these tracks into the CDs they burn, then how does this implicate the \$17 shrinkwrapped CD, and the huge international music industry that produces and distributes CDs?

In 1999, the year of the release of *The Matrix*, the *other* big hit was the Napster peer-to-peer file sharing system. What most galled the Music Industry conglomerate about Napster was the way one software hacker—Sean Fanning—had succeeded in taking their content—tracks ripped from CDs and converted into a compressed format (MP3)—and circulating them on the Internet utterly outside of their control. In '60s parlance, their copyrighted music had been "liberated." [footnote: In October, 2000, *Time Magazine* ran a lead article, "Meet the Napster" that represented Sean Fanning as the quintessentially American individual who sets out to challenge the System: "Shawn Fanning was 18 when he wrote the code that changed the world.... He didn't need friends, family, financing--he almost went without food. He was self-sufficient, gaining sustenance and strength from the work, as if by his hands he was creating his own manna."] The Matrix scenario envisions a world in which the "machines" achieve the unconscious wish of the Hollywood entertainment complex: absolute copyright of every element of the human sensorium, delivered by a cable to the

brain. Like Napster, *The Matrix* creates a heroic subject position for the rebel hacker, who, by hacking a system created by others, creates a new "community." In other words, by the *way* it exploits the possibilities opened by its own digital production--through its dystopian premise, through a hybridizing of film, comics and video games, through the inventive visualization of Neo's kung-fu hacking, and finally, through the cultural myths of sacrificial delegation it engages--*The Matrix* offers compelling way to experience the sinister and liberating possibilities of computable culture.

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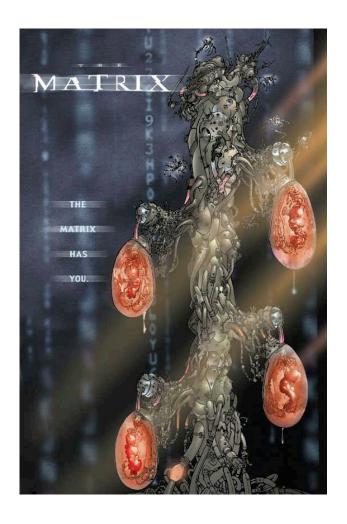


















¹ In "From Cinespace to Cyberspace: Zionists and Agents, Realists and Gamers in *The Matrix* and *eXistenZ*," David Levery contrasts Andre Barzin's myth of total cinema, which piously subordinates film to the reality it discloses, with "the storing up and re-creation of appearance known as virtual reality," a project he finds epitomized in *The Matrix*, especially when compared to the epistemological vertigo of *Existenz*, I find *The Matrix* reflexively involved with its techniques for rendering simulations of the real. (Journal of Popular Film and Television Winter, 2001, 151) ² I will be using the script version published in *the Art of the Matrix*. It carries the date, August 12, 1998. When changes have been made during shooting to the film released in March 1999, I will note those changes within the citation.