Pentagon Strategy, Hollywood, and Technowar

written by Carl Boggs | February 20, 2010

WITH THE GROWTH of U.S. imperial power and its military reach, warfare today extends across the cultural as well as the institutional and battlefield terrains, the result of great technological changes now altering the very character of modern combat. Expanded military influence within the corporate media and popular culture is an inevitable outgrowth of the largest war machine the world has ever seen. The aftermath of 9/11, with its open-ended "war on terror," reinforces this trend as the power structure turns increasingly to Orwellian methods of rule: media propaganda, technologies of surveillance and control, draconian law-enforcement methods, a warfare system that extends and deepens authoritarian politics. Renovated Pentagon strategy based on the high-tech "Revolution in Military Affairs" (RMA), a defense establishment article of faith since the early 1990s, underpins a more brazen, aggressive imperialism geared to heightened resource wars, geopolitical maneuvering, and efforts to crush political opposition. The likelihood of stepped-up armed interventions mounts, whatever party controls the White House, as U.S. global power increasingly depends on an ensemble of quasi-fascist ideologies — superpatriotism, worship of technology, militarism, national exceptionalism — for domestic legitimation. Yet, as we shall see, this embellishment of technowar turns out to have its own limits and contradictions.

Empire the Movie

THE U.S. PURSUIT of world domination gains crucial ideological support through the media, where images of superpower virtue can be seen daily, across the sprawling entertainment industry and elsewhere. According to standard texts and discourses, the United States is and always has been a peaceful, democratic nation forced to rely on military action only when threatened by demonic enemies. While there is little truth to such notions, they remain a staple of media and academic culture and are believed by enough Americans to ensure popular acceptance of a huge warmaking machinery and security state. The U.S. media is today saturated with representations of violence, routinely celebrating the exploits of gangsters, terrorists, and warriors of all types, a pattern accelerated by the rightward shift in American politics that came with the end of the Cold War and the events of 9/11. The neoconservatives, whose extreme hawkish views were only a decade ago confined to the political margins, had by 2002 gained control of U.S. foreign policy while moving to strengthen the media role as propaganda arm of corporations, the government, and the military — their success nowhere more visible than in foreign policy. The major TV networks, talkradio, even most print outlets have degenerated into a cheerleading chorus behind whatever military venture Washington decides to launch.

In the case of Hollywood, its recent film output mirrors this trajectory, even as producers and directors often fiercely defend their creative autonomy and liberal credentials. In 2003 and 2004 the studios spent lavishly on dozens of movies pervaded with combat motifs, including *The Last Samurai, Lord of the Rings, The Matrix Reloaded, Terminator 3, The Alamo,* and *Master and Commander,* all viewed by large audiences and praised by respected film critics. Also released were Quentin Tarantino's two martial *Kill Bill* sequences and the blockbuster epic *Troy,* with its many computer-generated scenes of war and bloodshed. In *The Matrix Reloaded* (2003), a marriage of Kung-fu movies, comic books, action/adventure films, and combat genre, directors Andy and Larry Warshowski employ such high-tech devices as robotics, arriving at a new breed of cyber-thriller filled with ultraviolent imagery, lethal weaponry, and spectacular battlefield exploits interwoven

with a fusion of humans and machines comparable to scenes from *Terminator 3.* Part of a planned trilogy, this *Matrix* episode won instantaneous cult status among young viewers, earning over $450 million the year after its release.

In Steven Spielberg's *War of the Worlds* (2005), based on the 1898 H.G. Wells novel that envisions aliens from Mars invading planet Earth, a new wave of killers from outer space threatens innocent, peace-loving earthlings — the perfect tale for an updated Cold-War-style paranoia in the post-9/11 era. Apparently referring to modern-day jihadic violence, writer David Koepp comments: "We don't know where they're from. They're from somewhere far away and they don't seem to want to tell us where they're from. They don't seem to want to talk at all. They just want to kill."[1] Like Commies of an earlier time, these recycled demons symbolize an omnipresent threat that is supposed to bring to mind the grave menace of dispersed, elusive Al Qaeda operations. *War of the Worlds* continues Spielberg's longstanding obsession with war as spectacle going back to *1941*(1979) and extending to *Saving Private Ryan* (1998)*,* where high-tech special effects heighten graphic images of warfare. As with *1941* and *Empire of the Sun* (1987), Spielberg relishes scenes of panic, of displaced people running from barbarian hordes, one young girl asking "Is it the terrorists?" Here we have, for the first time, a cinematic spectacle bringing all the drama of 9/11, the "new Pearl Harbor," to the big screen. A sci-fi thriller that is also a combat picture, *War of the Worlds* conveys a shadowy, fearsome world of nearly invisible enemies, ideal for a cinematic war on terrorism. Unspeakable evil pulsates through every frame of the movie, in which villains have no identity, no motive, no rationality, absolutely no redeeming features — cartoonish figures resembling demons of old Western and combat pictures. Aliens materialize as war machines with 200-foot tripods, so powerful they can instantly vaporize human beings. In the end, of course, the marauding invaders succumb, this time to voracious microbes symbolizing potent agents in the epic struggle against terrorist evil.

The new cycle of martial films features high-tech innovations, special-effects wizardry, and nonstop violence combined with blasting sound, with combat furnishing the key dramatic vehicle — a stratagem that has worked splendidly at the box office. Filmmakers have traditionally sought Pentagon assistance for technical and stylistic enhancements, but as digital technology becomes cheaper and more sophisticated the need for such collaboration diminishes. In any case, the glorified militarism favored by producers like Jerry Bruckheimer (*Top Gun, Armageddon, Black Hawk Down, Pearl Harbor*) has surely been driven more by ideological than by technical priorities.

The "war on terror" reinvigorates an aggressive U.S. military strategy, the extension of an imperial agenda that long predates the Bush presidency but which now has fewer limits of time and space — the best possible regimen for endless global struggle of good against evil, democracy against tyranny, civilization against barbarism. In a world of Hobbeisan chaos where fanatical madmen and terrorists run wild, people are more easily mobilized to fight Good Wars for noble and patriotic ideals. Those same militaristic values that buttress the empire and its war machine intersect with the commercial and aesthetic priorities of a film industry long attached to battlefield epics featuring patriotic heroes pitted against despicable villains. Today this narrative defines not only the combat genre but movie conventions like sci-fi, action/adventure, historical dramas, and horror films. Hollywood can even transform romantic comedies into combat spectacles, as with *Mr. and Mrs. Smith* (2005), the story of a husband and wife, each working as hired assassins and equipped with the latest automatic weapons, setting out to kill each other on assignment. Television has yet to match this cinematic wave, but Showtime's fall 2005 series, "Sleeper Cell," follows the pattern laid down by the entertainment industry: a group of Islamic extremists plots to destroy an American city, inspired by nothing more than pure mayhem and destruction. The characters include an Arab thug posing as member of a Jewish temple, showing again that terrorists can lead ordinary lives as they hatch barbaric schemes in the most unexpected places. Steven Bochco's "Over There,"

an FX channel series inspired by the events of 9/11 and the Iraq war, dramatizes the travails of U.S. frontline troops and is advertised as a program that "supports the troops by humanizing them." As the motif of foreign terrorism feeds into rightwing agendas — aggressive foreign policy, technowar, expanded surveillance, lavish Pentagon spending, a harsher law-and-order regimen — the weight of such agendas is felt across the culture industry.

The familiar Hollywood obsession with monstrous enemies takes a predictable new turn in post-Cold War media culture, with the casting of movie demons shifting from conventional Nazis, Japs, Gooks, and Redskins to a new lineup of modern-day evildoers: Arabs, Muslims, assorted terrorists, rogue tyrants, standard drug traffickers. Framed against the backdrop of U.S. global ambitions, such demons often represent racial stereotypes of the sort crudely recycled in hundreds of Hollywood westerns.[2] Although white-male heroes played by Sylvester Stallone, George Clooney, Arnold Schwartzenegger, Harrison Ford, and Steven Seagal have dominated the modern action/adventure genre, warrior-saviors now include minorities and women as in *XXX* with Vin Diesel, *Under Siege* with Denzel Washington, *G.I. Jane* with Demi Moore, *Kill Bill* with Uma Thurmann, *The Matrix Reloaded* with Carrie-Anne Moss, and *Mr. and Mrs. Smith* with Angelina Jolie. Of course such heroes (and heroines) equally rely on the marvels of technowar. Some within the new cycle of villains, moreover, might be expected to get hold of weapons of mass destruction — a motif exploited in such films as *True Lies, Under Siege, The Peacemaker,* and *Terminator 3,* where last-minute heroics barely stave off nuclear catastrophe. Demons in popular culture, especially those with access to doomsday weapons, serve reactionary ends insofar as they provoke the wrathful vengeance of a power structure under siege. At the same time, dehumanized Others furnish easy psychological targets at moments of public fear and paranoia that since 9/11 (and similar events in Europe) can be linked to public anxiety over possible new (Arab, Muslim) terrorist attacks.

As U.S. combat operations in Afghanistan and Iraq grow more destructive and costly — as the general contradictions of Empire sharpen — the ideological functions of the military-entertainment complex media take on new significance. The deadly effects of armed intervention include widespread human casualties, population displacements, a drain on material resources, and environmental ruin — not to mention the subversion of international law along with heightened attacks on domestic rights and freedoms. Among other things, propaganda distorts or conceals flows of information regarding these and other costs. As the media becomes more structurally and ideologically concentrated to better fit elite agendas, propaganda aims are more readily achieved — one indication being the vanishing political differences between Republicans and Democrats, especially around foreign and military policy. The culture industry has for decades been a vital conduit of imperial agendas, and Hollywood studios (despite their reputed liberalism) have rarely departed from this norm. Motion pictures have the visual power to sway mass audiences interested mostly in simple diversion. While propaganda is usually viewed as a distinctly *state* function associated with dictatorial regimes, modern capitalism is more sophisticated in its hegemonic operations, relying on a labyrinthine network of corporate, media, government, and military structures making even the most powerful ideological methods nearly invisible.

As high-tech information and control systems reshape U.S. military strategy, these same features of RMA also dominate media culture. Put differently: just as the Pentagon fixates on information technology and media power, the culture industry itself becomes increasingly fascinated with military imagery. There is a strong convergence, as during moments of buildup to armed intervention (Yugoslavia, Iraq) the media dutifully serves the Pentagon with its continuous ideological-framing operations — embedded reporting, hawkish "expert" commentary, right-wing talkshows, patriotic battlefield features. Since films take longer to produce and distribute than current-events TV and radio programs, Hollywood's impact on public opinion is inevitably more refracted, less direct and immediate. Yet, surveying dozens of mainstream films dealing with

terrorism and war in the 1980s and 1990s, it is easy to see how the big screen has turned into a propaganda vehicle for every U.S. imperial gambit, usually without need for drawn-out narratives or other verbal messages. In the theater, moreover, designated enemies can be graphically depicted in their full regalia, bigger- than-life, exaggerated in their diabolical features and stereotyped, sooner or later to be destroyed by fearsome weaponry. Jack Shaheen documents how Arabs and Muslims have been targeted across many decades of American filmmaking, more flagrantly in the 20 years or so since Hollywood began dwelling on terrorism.[3] As portrayed in films like *Under Siege*, *The Sum of All Fears,* and even the otherwise enlightened *The Three Kings* (1999), Arab and Muslim villains (typically thugs and terrorists) seem to fill an ideological void left by departing Cold War enemies. Here the triumph of superior technology, namely *military* technology, carries great narrative and political weight, endowing (usually patriotic, masculine) heroes with righteous virtues in their pursuit of a exalted goals. In the instance of film especially, media culture works more powerfully than cruder, more obvious forms of government indoctrination — the ideal propaganda for empire.

Hollywood and the Pentagon

THE PENTAGON has been increasingly sensitive about how the U.S. military presence around the world is depicted to mass publics. The film industry has a long partnership with the armed forces: military public relations offices typically review movie scripts in exchange for access to bases, equipment, stock footage, and expert consultation, all needed for "authenticity." The deep patriotic and militaristic content of most combat pictures, however, is rarely determined by stringent Pentagon controls over how producers, writers, and directors do their work, but flows from the larger political and media culture that is the repository of imperialist ideology. So attached are many Hollywood filmmakers to the combat spectacle with its enduring assumptions of superpower benevolence that they rarely wander far from the "bipartisan" foreign-policy consensus.

Of course, the Pentagon would prefer to transform Hollywood movies into simple infomercials for the military, but no filmmakers nowadays would be ready to follow such a dictat. Phil Strub, longtime chief of the Pentagon's liaison office, has said that "any film that portrays the military as negative is not realistic to us," adding that combat-themed movies ought to satisfy three criteria: depict military life as "realistically" as possible, inform the public about U.S. military prowess, and assist in recruitment.[4] Historically, this agenda has met with considerable success. As David Robb writes in *Operation Hollywood*: "Allowing the world's most powerful military to place propaganda into the world's most powerful medium — unchecked and unregulated — for over 50 years has certainly helped the Pentagon get more recruits for the armed forces and ever-increasing appropriations from Congress . . . "[5] While there is a legacy of frequent, sometimes intense conflict over armed-forces guidelines, in fact Strub has been uniformly admired in Hollywood and few pictures have deviated much from the ideological consensus he fostered — patriotism, a virtuous U.S. military, glorification of battlefield exploits, masculine heroism.[6] Although the Pentagon has refused assistance to works like *Memphis Belle, Courage Under Fire, A Few Good Men,* and Oliver Stone's Vietnam trilogy — all savaged for their "negative" images of the military — the overall historical record is one of intimate collaboration serving both partners.

From its earliest days, Hollywood promoted a culture of militarism, with mass audiences offered a regular diet of combat and action movies replete with graphic scenes of death and destruction. At first this contribution was muted owing to the relatively small scale of U.S. military power. But the studios quickly became fascinated with the combat genre (the dominant form if combat Westerns are included) since it guaranteed huge box-office returns given the nonstop action, graphic violence, appealing heroes, exotic settings, the contrived glamour of military life, and happy endings. The armed-forces brass naturally relished this kind of cinema too and worked diligently with filmmakers to glorify battlefield action and everything that surrounded it.

During and immediately after World War II, combat movies dwelled on noble American military triumphs over evil monsters in the form of Hitler and Mussolini — propaganda for the ultimate Good War, no reservations or apologies. The famous *Why We Fight* series, organized by Howard Hawks and other studio luminaries including John Ford and Frank Capra, exemplified this close alignment of Hollywood and the War Department. With great war dramas fresh in mind, the public was drawn to battlefield stories made more authentic owing by extensive use of stock footage and technical advances over earlier renditions of combat. Films released over the next two decades fit this pattern, assisted by swollen Pentagon public relations apparatus. To win such assistance, studios had to follow strict guidelines: no "negative images" of military officers, no excessive foul language, no "sexual improprieties" like adultery, only moderate drinking, and so forth. Yet if filmmakers often argued with Pentagon censors over these strictures, the larger motifs of patriotism, male heroism, and essential goodness of U.S. military action were taken for granted. Even those films that ran afoul of Pentagon censors, like *From Here to Eternity* and *The Caine Mutiny,* scarcely violated this ideological formula. The Good- War narrative, *de rigeur* for sci-fi and horror as well as combat genres, shaped the Cold-War era during which Hollywood gladly served as a cultural arm of U.S. global interests. The mixture of warfare and cinema was so explosive that it is easy to see how, across the decades, an actor like John Wayne could be so widely viewed as the ultimate icon of military courage and patriotism, the essence of a combat hero, dwarfing any real-life battlefield figure.[7]

In the Vietnam aftermath, however, military portraits grew more complex and jaundiced at the hands of directors like Francis Ford Coppola, Oliver Stone, Stanley Kubrick, and Barry Levinson even as the Cold- War consensus remained intact. The Pentagon sought to counter film assaults on the military during the late 1970s and 1980s, but most "assaults," even where harsh in tone, rarely challenged the main premises of U.S. foreign and military policy. Any criticism would have meshed with what former Secretary of Defense Robert McNamara later conceded in his memoirs and in *The Fog of War*, namely, that certain "mistakes" and "miscalculations" were made in carrying out the Vietnam War: the problems were tactical, matters of implementation. Good- War pictures about humiliating U.S. defeat by a poor third-world country surely would have been difficult to make, even in Hollywood, but heralded antiwar messages of the "New Hollywood" directors turned out to be limited and inward, consumed mostly with *homefront* costs and traumas. At the same time, films of the period typically conveyed elements of the "Vietnam Syndrome" tied to national failure and impotence, suggesting that Pentagon leverage over the film industry had at least temporarily waned. Where the military did assist in Vietnam War films (for example the *Rambo* series), the idea was to convert painful defeat into miraculous victory, predictably with little success. Other reputedly antiwar films like *The Deer Hunter, Coming Home,* and *Casualties of War* portrayed the military debacle from a distinctly American standpoint.

Post-Vietnam erosion of the U.S. military image would soon be reversed by a new cycle of ultrapatriotic, militaristic films starting in the late 1980s, with Tony Scott's *Top Gun* (1986) a seminal turning-point. More crucial yet was the Gulf War, the first high-tech TV combat spectacle leading to a post-Cold War revival of patriotism and militarism, with Desert Storm exposing viewers to all the flourishes of an action/adventurer blockbuster.[8] Not coincidentally, it was the Gulf War that first enabled the U.S. military to unveil a truly integrated, networked communications system.[9] Throughout the 1990s the film industry rekindled its alliance with the Pentagon, while dazzling images of military prowess and battlefield heroism began to transcend the combat genre as such. Meanwhile, the refinement of digital technology meant that Hollywood no longer required military help to establish cinematic "authenticity", which in any event mattered little to targeted youth audiences scarcely interested in the actual history of warfare. As high-tech spectacles reshaped both filmmaking and military action, themes of patriotism, technological wizardry, and combat heroism were more effectively conveyed to theater audiences. Profitable box-office returns

of 1990s movies like *True Lies, Armageddon, Independence Day,* and *Black Hawk Down,* not to mention World War II epics like *Saving Private Ryan* and *Pearl Harbor,* reflected this pattern. Those few pictures outside the dominant trend — for example, Ed Zwick's *Courage Under Fire* (1998) and Terrence Malick's *The Thin Red Line* (2001) — would receive no Pentagon support and limited marketing resources.

As cinematic technology reshapes media culture, the appeal of martial narratives and images to males under 30 already steeped in video-games inevitably spreads. Modern warfare builds on that same technology, visible not only in film but TV, the Internet, and popular magazines. The most successful recent Hollywood-Pentagon collaboration was the 2001 Bruckheimer/Michael Bay war epic *Pearl Harbor,* with its sentimental love story, old-fashioned male heroism, glorification of aviation, drama of national revenge — and creative use of computer graphics, especially for the attack on battleship row. A $140 million film, *Pearl Harbor* was marketed heavily for its powerful historical symbolism, and the strategy worked despite the picture's lack of historical veracity. The military gave filmmakers full access to Pearl Harbor and Hickam Field, providing all the needed equipment, supports, and human resources. As before, public relations officers were little concerned with factual authenticity, opting instead for a fairy- tale rendition of historical events, such as wildly overstating the efficacy of the U.S. aerial counterattack and devoting fully one-third of the movie to the ill-fated Doolittle Raid on Tokyo in April 1942, falsely shown as a moment of triumphal revenge.

The much later "Pearl Harbor" turned out to be the terrorist attacks of 9/11 — yet another case of an innocent nation under attack from sneaky evildoers, followed by an outpouring of vengeful patriotism. After 9/11, Bush emissary Karl Rove went to Hollywood seeking media help in the "war on terror," but the response of industry leaders was decidedly cool; no studio or producer would commit to an ideological campaign along lines of the *Why We Fight* series. Ironically, however, these same studios had been churning out films about the terrorist menace like the *Delta Force* and *Navy Seals* episodes, *Executive Decision, The Peacemaker,* and *Under Siege* for nearly two decades — films that would safely have met the demands of Rove and the neocons.

Technowar and Media Culture

By the 1990s, the merging of technowar and media spectacle had become vital to the flexing of imperial power. Meanwhile, stepped-up U.S. efforts to colonize the Middle East, with Iraq as centerpiece, contributed further to the expanded military influence over public life. By mid-2002 the Bush/neocon drive toward war, in reality a bipartisan venture from the outset, was being expertly marketed by an ensemble of government, military, and corporate-media interests designed to forge popular consensus and marginalize dissent. Propaganda deftly tapped into public fears of a jihadic attack, of foreign madmen and terrorists gaining access to weapons of mass destruction. The phony rationale for war was dutifully repeated and sugarcoated by a craven media, its jingoism fed by embedded journalism and ensuring high ratings and profits.

The film industry was less directly engaged in the Iraq war, although dozens of movies glorifying high-tech combat against primitive foes of Western democracy had long ago made their imprint on the political culture. War and action/adventure movies of the 1990s seemed likely to bolster public readiness for U.S. military action against designated foreign threats. The warrior ethos was by no means limited to TV and cinema, having spread into a new wave of high-tech magazines and above all the lucrative video-game business that by the late 1990s was offering a "full spectrum" of machines for both military training and entertainment geared to simulations of realistic battlefield action. In mid-2005 seven of the top ten best-selling games had combat motifs increasingly in demand after the U.S. invasion of Iraq, popular among a young generation attuned to the ultra-violent virtual world of war. (Roughly 70 percent of all buyers are under 20, despite legislative bans on sales to minors in several states.) War games are not only extremely bloody but contain frequent

racist and sexist targeting of enemies. Based on interactive battlefield scenes, the videos teach a simple lesson: violence is the preferred, usually the *only,* answer to human conflict — the more lethal the better. In the post-9/11 ambience many games, produced by corporate giants like Nintendo, Sony, and Microsoft, feature scenarios of payback through high- tech armed onslaught.

War games originated in the Vietnam era, but the main catalyst was the Pentagon embrace of RMA (Revolution in Military Affairs), stressing high-tech weapons and communications systems, new surveillance devices, remote warfare, robotics, and weaponization of space. The military is now the main designer of war games developed through a working partnership with the entertainment industry, computer firms, and academia. At the University of Southern California, for example, the Institute for Creative Technologies (ICT) links these partners through a series of lucrative grants (including $100 million from the Army in 2004) to manufacture sophisticated cycles of war games. The games replicate military field operations and present creative strategic and tactical options for players, focusing on unconventional or "asymmetric" warfare in mostly urban settings to fit counterinsurgency programs.

Simulated on large high-resolution screens, the drama of war engulfs the total visual field, imbuing combat with elements of aesthetic beauty and playful excitement, what one game producer calls the "dopamine rush." Thanks to the wonders of digital imaging, moreover, techniques of video-game and film production have gradually merged since the mid-1990s, inspired by shared battlefield and action/adventure formats. Viewers see elements of technowar in such movies as the later *Star Wars* episodes, *Pearl Harbor, XXX, Windtalkers,* and *The Matrix* series. Related innovations have entered paid video programs linked to computers and portable devices, giving rise to a convergence of electronic products around film, video games, and the Internet, driven by tech firms like Microsoft, Intel, and IBM collaborating with media giants like Disney, Time-Warner, Sony, and NewsCorp.

With visual backdrops set in World War II, Vietnam, and Iraq, war games account for more than $28 billion in sales annually, a figure expected to rise dramatically. Their specialty is violent revenge fantasies like those in the *Rambo* series*,* many drawn from movies like *Delta Force, Black Hawk Down*, and *Batman Begins* — the games and movies driven by the same digital technology, each influencing the other just as each embraces the military experience. In "Full-Spectrum Warrior" (2004), made by Microsoft and ICT and produced at the Army Infantry School in Fort Benning, Georgia, a realistic simulator allows participation in urban combat against guerrilla fighters. Atari's "Act of War" (2005), written by former Army Captain Dale Brown, features a group of military vets tracking down international terrorists who plan to destabilize the world economy. Produced at the same time, THQ's "Destroy All Humans" is marketed to players asked to take "One Giant Step *on* Mankind." At the 2005 Electronic Entertainment Expo in Los Angeles, the industry unveiled a new generation of video games and consoles, with giant screens marketing hundreds of commando adventures and warfare scenarios built around the latest "interactive" battlefield scenarios. Writing in a popular gaming magazine, Jack Thompson argues that when young players become absorbed in combat videos for hundreds or thousands of hours, they often wind up addicted to battlefield violence: "These games don't just teach skills — they break down the inhibition to kill. We've supposedly been trained by society and our parents not to kill another person, so the way to break that down is to put a soldier in a Virtual Reality (VR) setting, which will be far more effective in the long run."[10]

Pentagon strategists nowadays paradoxically mimic Hollywood in borrowing advanced technics of warfare created at the studios. One example is robotics, long a staple of the U.S. space program, which has come to play a vital role in both filmmaking and military planning. In 2004 the Army created the SWORDS program featuring three-foot robotic fighters outfitted with tank tracks, night-vision devices, and mounted automatic weapons that can fire more than 300 rounds per burst. In

early 2005 the Army deployed 18 SWORDS units to Iraq for the first-ever sustained use of remote-control ground warfare, with more units ordered. The system embellishes images of killer droids in earlier sci-fi movies, renegade cyborgs in *Blade Runner,* and robotic armies facing off in different *Star Wars* episodes (although some contain distinct anti- imperialist narratives). The Pentagon also built an unmanned "trauma pod" that deploys robots for surgeries and other medical procedures in combat situations, part of its move to automate diverse sectors of the battlefield, both ground and air, with at least one-third of all military vehicles expected to be unmanned by 2015. In spring 2006 the unmanned ground vehicle R-Gator, built by John Deer and iRobot, is scheduled to be deployed, one of a new cycle of "smart" vehicles built to perform a series of combat missions. Added to these inventions will be refined microwave beam weapons deployable for "crowd control" in urban warfare.

In 2003 producers of the Schwartzenegger vehicle *Terminator 3* created a spectrum of high-tech weapons and vehicles specifically for that picture, a film tribute to robotic combat. Marketed through its own "official" magazine, the movie introduces a "new universe of machines" powerful enough to vanquish any imaginable foe. The magazine describes Schwartzenegger as an "unstoppable cyborg" fresh off the assembly line, equipped with an arsenal of devastating "T3" products. For the movie, Honda built the most advanced humanoid robot ever, said to profoundly influence the conduct of battlefield action in both cinema and warfare, using remote systems driven by molecular and cellular devices made possible by nanotechnology. According to one writer, stressing the connection between film and combat videos, "one of the most important things to note with remote warfare is that it distances soldiers from death . . . and [they] find it easier to kill. A generation of children raised on violent video games could therefore be excellent future soldiers."[11] Technowar allows for a safe psychological distancing from combat horrors, something always intrinsic to aerial warfare but now extended to ground action. The killing process has grown more technically ritualized: targets on a screen are identified and then blown away by pressing buttons or deploying robots to unleash deadly missile and bombing attacks.

The Pentagon's own Defense Advanced Research Projects Agency (DARPA) closely follows these cinematic innovations — a staple of recent combat, action/adventure, and sci-fi movies — as it sharpens new battlefield technology along lines of SWORDS. Robotics, information technology, militarization of space, combat video games, high-tech and unmanned planes, and precision-guided weapons all combined reconfigure modern warfare as embraced by both Hollywood and the Pentagon. The military openly solicits technological assistance from the film industry, video-game business, and academic centers like ICT. A vast extension of George Lucas' *Star Wars* empire, recently installed at the old Army Presidio in San Francisco, is equally rich in cinematic and military potential. The Letterman Digital Arts Center cost $350 million and employs 1500 people who toil in a universe of epic clashes between good and evil, where warrior cultures and superweaponry take center stage in the drama of superhero myths drawn from the work of Joseph Campbell and others.[12] And like other studios always looking to create more spectacular warfare imagery, the sprawling Lucas facilities hire scores of retired military officers as technical consultants.

As a linchpin of U.S. global power, technowar strengthens the military component of imperialism at a time when Washington understandably prefers to downplay its unsurpassed arsenal of weapons of mass destruction. The 2005 round of new Pentagon reductions, including dozens of base closings across the country and in Europe, is best seen within Secretary of Defense Donald Rumsfeld's modernization scheme to make combat forces lighter, more flexible, more high-tech, and more lethal — a project encoded in the 2005 Quadrennial Defense Review. (The calculated savings are paltry — probably no more than five billion dollars yearly.) A redesigned armed forces is supposed to augment U.S. capacity to control the planet at a time when explosive turbulence (social, environmental, military) is expected to increase throughout the 21st century.

The neocons have always viewed space militarization as basic to solidifying U.S. command and control systems over the planet, as it permits for a more efficient worldwide attack capacity. The Bush administration, working to revamp the National Space Policy, has pushed hard for a more aggressive space program. General Lance Lord, head of the Air Force Space Command, has said the U.S. must seek absolute military domination of space — a goal seen as both easily reachable and non- negotiable, and one that means eventual deployment of sophisticated weapons in space (including nuclear devices). The U.S. now has roughly 70 satellites in orbit, vital to such military purposes as navigation, communications, and intelligence without which the launch of unmanned Predator drone planes and other high-tech devices used in Afghanistan and Iraq would be impossible. Surveillance mechanisms are crucial: the Pentagon is now developing a new generation of spy satellites as part of the classified Future Imagery Architecture program. Based on the Hubble Space Telescope, except that they face the earth, these satellites will be equipped with optical lenses that can take detailed photos of even the smallest human earthly movements. Assisted by space technology, the Pentagon already possesses a hypersonic glider with global strike capability, prepared to strike any target in the world within 90 minutes. The misnamed Strategic Defense Initiative, primarily an *offensive* weapons scheme, is central to a full-spectrum strategy that would enable the United States to counter Russian and Chinese military power.[13] The militarization of space aggravates the threat of a new arms race likely to pose the question of planetary survival but, as Noam Chomsky points out, "the basic [U.S.] principle is that hegemony is more important than survival."[14] Now costing roughly $20 billion a year, the space budget is expected to skyrocket to $50 billion by 2007.

Technowar further emboldens a reckless militarism and messianic exceptionalism that concedes few limits to American power. Moreover, technological superiority has come to signify, and justify, a moral and political supremacy often invoked to rationalize any U.S. imperial aggression, helping legitimate "preemptive" military action and justify outright contempt for troublesome international rules and agreements. High-tech warfare ultimately *reduces* curbs on United States militarism and helps fuel the crude turn toward *Machtpolitik* by elites of both parties. The U.S. has violated or refused to endorse several international treaties and laws, spurned the U.N. Charter prohibiting military aggression, flouted the Geneva Accords in its systematic mistreatment of prisoners, and carried out deliberate assaults on civilian populations (as during 2004 in Fallouja, where an entire city was destroyed to suit counterinsurgency goals). While such criminal behavior has deep roots in American history, new refinements of technowar give U.S. leaders yet another powerful weapon — both materially and ideologically — in their pursuit of a new Manifest Destiny.

The Limits of Technowar

SINCE HIGH-TECH MILITARISM does so much to revitalize the warfare system, its capacity to strengthen U.S. imperial power ought to be substantial. The evidence so far, however, suggests what logic might reveal: technowar is riddled with its own illusions and contradictions. What saturates movies and video games is not always so easily translated into real life. While the purely *informational* element of military operations has been augmented, not to mention the sheer firepower and accuracy of modern weaponry, the U.S. drive toward world supremacy — aligned with its push for neoliberal globalization — gives rise to problems that technowar itself cannot possibly solve. Some of these problems are visible in escalating blowback, notably in militant forms of resistance produced by the invasion and occupation of Iraq.

While technowar broadly understood promises all the spectacular combat achievements of a blockbuster film or video game, replete with fascinating "shock and awe" battlefield scenarios, its success has fallen well short of what Pentagon strategists clearly expected. The Iraq calamity reveals both strengths and weaknesses of a high-tech military — rapid battlefield victories followed by a protracted, bloody occupation that American planners surely never anticipated and probably

cannot defeat short of nuclear war. Since mid-2003, moreover, public support for this failed venture has steadily waned as costs mount and resistance intensifies, sinking to Vietnam War-levels of under 35 percent (summer 2005) and producing the first signs of Congressional opposition. Meanwhile, recruitment quotas for all service branches were well off target, a predicament deepening with each (almost daily) horror story out of Afghanistan and Iraq. The Army was lagging 25 percent behind its 2005 quota with no turnaround in sight, even as recruiters aggressively solicit teenagers with offers of bonuses up to $35,000 and promises of exciting jobs. The Iraq disaster alone has taxed Pentagon *human* resources well beyond capacity: of some 140,000 troops in the field more than 60,000 were drawn from National Guard units, with additional tens of thousands returning for a second tour of duty. The nightmare of fending off a tenacious, skilled, dispersed insurgency fighting on its own turf, in often brutal weather conditions, has taken a severe toll on U.S. morale and combat efficiency. Young field-grade officers, many recently graduated from West Point, are reportedly leaving the Army in record numbers. After long months in the field, moreover, troops can look forward to possible homefront ordeals including bleak job prospects and various post-traumatic stress disorders leading to high incidence of mental breakdowns, substance abuse, and suicide.

As recruitment and retention problems worsen — as experienced, well-trained troops needed for field operations become harder to find — the Pentagon brass turns more desperate. The capacity to sustain imperial hegemony, which Rumsfeld and the neocons naively believed could be solidified by means of technowar, now seems well beyond the resources of an all-volunteer force. The Army spends $1.5 billion yearly on recruitment, with 6000 operatives sent around the nation to cajole mostly poor youth with inducements of jobs training, good pay, and exotic assignments, although what the armed forces really want is a steady influx of frontline warriors for long tours of duty in life-threatening battle zones. High-school students encounter zealous recruiters in hallways, at home, in shopping malls, and on their computers. Bush's 2002 No Child Left Behind Act grants recruiters access to students' private information and allows unsolicited visits to homes. So anxious is the Army for recruits that criminal records, drug problems, and lack of diplomas are increasingly overlooked. Junior ROTC programs have been established nationwide, as the Pentagon moves to build a corps of "teen cadets" in high schools and even middle schools.[15] The U.S. military has grown so desperate that it has poured considerable resources into a media campaign *within Iraq* to smooth over the inevitable horrific images of occupation.

But recruiting campaigns have mostly stalled, torpedoed mostly by the Iraq disaster — a point conceded by General John P. Abizaid, chief of the U.S. Central Command, who in spring, 2005 said the military reports from Iraq create new obstacles for recruiters, suggesting that a youth regimen of action/adventure blockbusters and combat video games has failed to produce the expected ideological results. Nor has a majority of Americans bought ridiculous Bush/neocon attempts to frame Iraq as a World War II-style "Good War," or even as a heroic front in the anti-terror crusade. In fact, the psychological outcome of such cultural products as films and games cannot be assumed: violent combat on screen might well end up as little more than fantasy, only rarely translated into real-life situations. Aside from PlayStation2 and Xbox, it is true that young people have always played games, some rather violent — and indeed there is no evidence proving that kids have become more violent over the past two decades. In the case of movies, the blockbuster phenomenon apparently matters less to a young generation concerned less with movie *content* than with the high-tech thrills, celebrity tales, and incessant tabloid gossip that surrounds it.

In early 2005, the Pentagon hired an outside marketing firm, BeNow, Inc., to carry out direct advertising, hoping to reach a targeted youth population where a militarized popular culture had so far failed. Set up by the Joint Advertising, Marketing, Research, and Studies Office of the Pentagon, the program is designed to compile databases on teenagers and college students, including academic, banking, and motor-vehicle records. Non-citizens are targeted as part of the

Development, Relief, and Education for Minors Act, directed at children of undocumented workers residing in the United States for at least five years entitled to citizenship after serving a full military term. Still, the Army Recruiting Command head, General Michael D. Rochelle, predicted that the recruiting morass would continue and likely worsen through at least 2006, with the Army needing yet another 80,000 *combat* soldiers just to maintain its 2005 Iraq occupation strength. (The Army can be expected to focus recruiting efforts on the tens of thousands of evacuees produced by Hurricane Katrina, many of whom could be homeless and/or jobless well into the future.)

The crisis of an all- volunteer military illustrates a flawed premise of technowar and RMA — that a smaller, flexible, more high-tech armed forces can serve U.S. imperialism better at a time when conventional ground warfare has largely exhausted its potential. The present volunteer model goes back to 1973, when 40 years of conscription was finally scrapped — an inevitable outcome of the Vietnam War. The difficulty facing war planners today is that global domination requires far more than superior technology and firepower, especially when ground troops are needed in large numbers for counterinsurgency, a lesson U.S. elites seemingly never absorbed from Vietnam. The United States presently has 1.4 million troops in uniform, but less than one-third are available for field operations and fewer yet serve as front-line troops. In Iraq and Afghanistan, the military presence includes not only large infantry, armor, and airborne deployments but forces required for intelligence, security, logistics and ongoing infrastructural tasks. Despite privatization of certain support activities, such undertakings cannot be sustained for long without reimposing some version of the draft, an option fraught with new and likely unacceptable political costs.

Technowar is laden with other problems: refined data-gathering methods can heighten combat efficiency, but their value ultimately depends on how that data is filtered, interpreted, and acted upon, that, is, on *human* intelligence with its peculiar frailties and biases. Machines at the disposal of the Pentagon and agencies like the CIA, FBI, and NSA do not function autonomously but rather work through a series of institutional and ideological mediations. There is nothing shocking about the fact that repeated warnings of impending major terrorist attacks, furnished by U.S. intelligence in the months leading up to 9/11, were ignored or downplayed because the Bush administration had fixed its gaze on entirely different horizons, mainly regime-change in Iraq. In the case of the Iraq war, it has become clear that "intelligence" was wildly distorted and even manufactured to suit White House plans for "remapping" the Middle East. As James Bamford shows in *A Pretext for War,* moreover, U.S. intelligence operations have often morphed into sheer propaganda thinly-disguised as data-gathering, then used indiscriminately by journalists like Judith Miller of the *New York Times* to support Pentagon military objectives.[16] As for high-tech surveillance, NSA eavesdropping devices that rely on spy satellites orbiting some 22,000 miles above earth can transmit only so much useful intelligence — and virtually nothing when it comes to elusive insurgent or terrorist operations. (Whether the touted new Future Imagery Architecture system will transcend such limits is doubtful.) Reports from the field in Afghanistan and Iraq indicate that patrols rarely have adequate knowledge of imminent attacks despite access to the most advanced electronic communications. Two murky "battlefields" confronting the U.S. military today — jihadic violence and insurgency — have no identifiable "fronts" or fixed targets that fit conventional models. Pentagon strategy is confounded by a world of dispersed, ever-shifting networks extremely difficult to locate, much less destroy, by means of standard or high-tech military action. Moreover, new global communications systems (not only encryption but fiber- optics and the Internet) process literally billions of electronic transmissions daily, further complicating the task of processing and interpreting what is received.

U.S. military strategy persists in the illusion that challenges to American global power can be isolated and "zapped" by overwhelming force — an arrogant, militaristic outlook that technowar with its fixation on supposedly fail-proof information systems only reinforces. The Iraq venture magnifies

this illusion, at the cost of tens of thousands of lives and yet another devastated country, as the Pentagon faces growing insurgencies and jihadic forces it has no viable military doctrine to fight. One intractable problem is that the very power and scope of U.S. armed might, a surface advantage, dictates that many anti-system forces will adopt "asymmetric warfare" designed to neutralize that very advantage. It might be that technowar, despite its capacity to destroy the planet many times over, rests upon crumbling strategic foundations, exacerbated by the chauvinistic belief that American "values" (i.e., imperial domination) are so righteous, so inseparable from universal goals of peace, democracy, and human rights that they will be eagerly welcomed by everyone outside a few small enclaves of evildoers. The idea that resistance to U.S. global hegemony is confined to tiny pockets of anti-Western fanatics bereft of motive, logic, or political aims, a plague to be eradicated by maximum force — something technowar should easily achieve given enough time — turns on itself. Such an illusion ensures new cycles of blowback along with a strengthening of the warfare and security-state systems at the heart of a barbaric — but increasingly vulnerable — imperial order.

Footnotes

1. *Creative Screenwriting,* vol. 12, no. 3 (2005), 52.

2. Ward Churchill, *Fantasies of the Master Race* (San Francisco: City Lights, 1998), 167-224. Churchill refers to this as the "cinematic colonization of American Indians."

3. Jack G. Shaheen, *Reel Bad Arabs: How Hollywood Vilifies a People* (New York: Olive Branch Press, 2001).

4. David L. Robb, *Operation Hollywood* (Amherst, N.Y.: Prometheus Books, 2004), 143.

5. Robb, 365.

6. The Pentagon is hardly alone in this practice: taxpayers help fund the propaganda efforts of other government interests, including the FBI, CIA, Secret Service, State Department, and even the White House.

7. Lawrence H. Suid, *Guts and Glory: the Making of the American Military Image in Film* (Lexington, Ky.: University of Kentucky Press, 2002), 135.

8. Douglas Kellner, *The Persian Gult TV War* (Boulder: Westview Press, 1992), ch. 10.

9. See Bruce Berkowitz, *The New Face of War* (New York: The Free Press, 2003), 71.

10. *Electronic Gaming Monthly* (June 2005), 32.

11. *Terminator* Magazine (2003), 52-53.

12. "Life After Death", *Wired* (May 2005).

13. Karl Grossman, *Weapons in Space* (New York: Seven Stories Press, 2001), 9-18.

14. Noam Chomsky, *Hegemony or Survival* (New York: Holt, 2003), 231.

15. See Karen Houppert, "Military Recruiters are Now Targeting Sixth Graders. Who's Next?" *The Nation* (September 12, 2005).

16. James Bamford, *A Pretext for War* (New York: Anchor Books, 2004), 294.