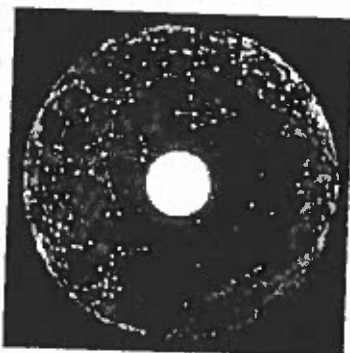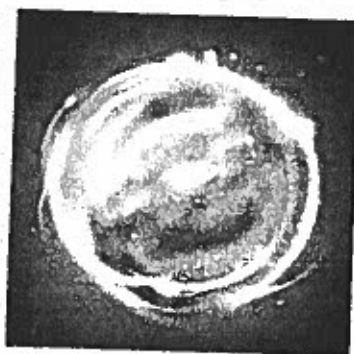Christians, Buddhists, and David Icke of the U.K. and others who believed existence is a creation; many of whom are, and were, good people. Mr. Icke has called the universe a "quantum computer" and that verbiage may not be that far off. I still believe all gods are false especially in a simulated universe, and I am relying on myself, come hell or high water. I still do rely on only myself and my family most often, even as a mind and body slave with slaver perps constantly working against myself and the other Targeted Individuals, reading our minds 24 hours a day and working 110% against us who are virtuous and good, unlike perps who only fake goodness.

TYPE I CIVILIZATION harnesses all the resources of a planet. Carl Sagan estimated that Earth rates about 0.7 on the scale.

TYPE II CIVILIZATION harnesses all the radiation of a star. Humans might reach Type II in a few thousand years.
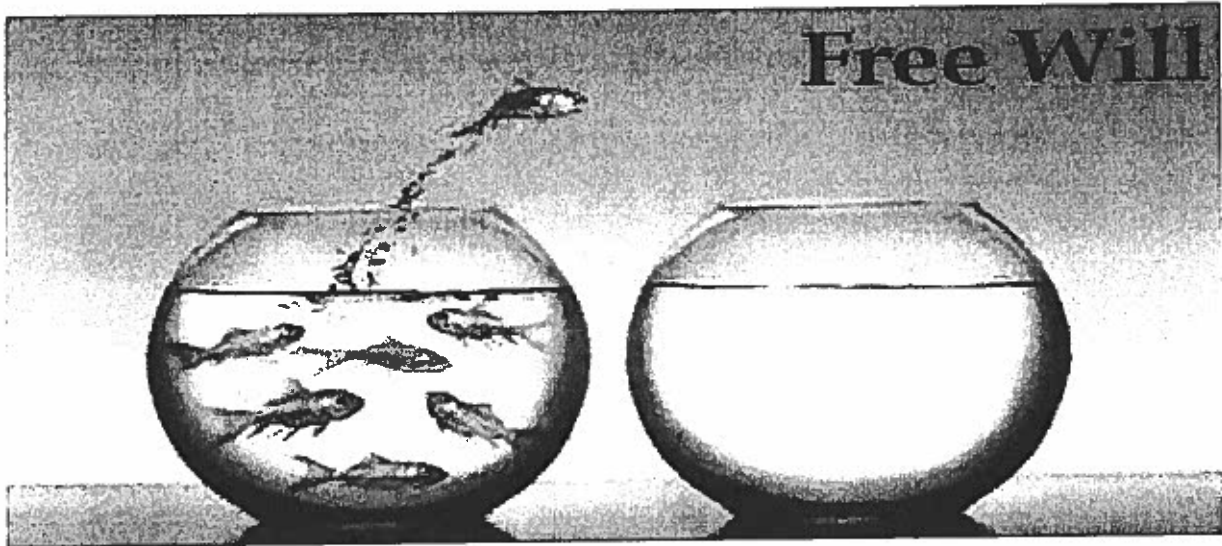
TYPE III CIVILIZATION harnesses all the resources of a galaxy. Humans might reach Type III in a few hundred thousand to a million years.

Perpetrators Are a National and International Security Threat

It takes over an hour and a half just to read the full definition of EVIL from Plato and Stanford's Philosophy Department, and perps fit nearly all the definitions of evil by these and other measures. The criminal gang attacking myself, and my family, allegedly even broke into the Stanford Philosophy Department to censor/omit portions of the definition of evil, to keep them and their huge evils more secret, and literally out of the definition. My whole family has been attacked. I was even sold for rectal torture raped for 5 years in a "virtual space" around my very human body that did not involve my sphincter, however did torture my inner rectum. Sexual attack and humiliation in E.M.F. electromagnetic frequency room around 3-dimensional humans in real life is a means of torture that also happened to Kevin Christian of Georgia, who is a YouTube fellow Dark Journalist

discloser about Remote Neural Monitoring, these gangs and their immeasurable, huge evil. These crimes have happened many other men, women and children worldwide. Good cops, to military professionals to political dissidents and girls as young as 12 are made targets often for being really good people, moral and courageous against evil. Many T.I. are female and many T.I. are made sex slaves like Monarch mind-controlled kids, MKUltra mind-controlled adults all wickedly abused by the nearly invulnerable and lawless perps made possible by this technology: www.openbci.com, black budgets, black ops and evil. The Brain Computer Interface headgear hardware, used to technologically astral project, was recently featured on a University of Washington press release presented as something new and benign. B.C.I. is in fact old, and horrifically evil in the wrong hands it's already been in for decades, or maybe longer. Tech enabled forms of voodoo, and satanism are given amplitudes of real power with these technologies, the internet and corrupt people using B.C.I. where satanism and voodoo had little to no power at all to begin with. We all, 7 billion mammal human earthlings, still keep shuffling around meta-money paper debt slips to the central bankers with pictures of dead presidents on them, thinking in error anything over $70,000 in U.S. income in a year is going to make us happier, all while we are being deeply taken advantage of by E.M.F. perps and worse. A currency of our suffering exists more so than we really know being members of a slave race designed to be deceived, in my humble option. We have all been distracted from issues and facts like many human impulses are secretly being controlled remotely by organized crime, overlapping with governments with black ops advanced technology. These impulse controls, total individual human domination crimes need to be stopped and the stopping of that evil is more important than money. Our U.S. currency is not worth the cost of printing it, literally, if these gangs are allowed to break the U.S. Constitution as they do over all the Targeted

Free Will

Individuals lives, secretly, severely and against creation itself. I cannot emphasize enough how high of law lawbreaking perping T.I. actually really is; it's crimes against creation, the worst of all crimes. Long term, short-term, mid-range and in a pinch Earthling human free will itself is at risk. Targeted Individual lives lived, is lives worse than death; trust me on that. We human beings were not meant to have free-will stole, remote controlled by sociopaths, psychopaths and narcissists and other evils. What is done to us T.I. is so evil it is literally unbelievable to many in the general public. That doesn't help us in justice seeking.

I am Good at Being Good and a Threat to Perpetrators and Their Truly Evil Ways

Information exchange of dangerous and not well-known topics in years prior was much more difficult; mostly journalists or spies acquired and reported on topics that could get them tortured, or killed. A few of my heroes have been Benjamin Franklin, and my grandfather Lieutenant Colonel Leo C. Skelley M.D., who was a medic on the second wave at the beaches of Normandy and as a medic he had to choose who lived, and who died, in wartime triage and went on to own a hospital in McMinnville, Oregon and raise the family I descended from. My dad is excellent role model of mine, also. Under secret surveillance and abusive mind control already, I was the first to invent the newspaper comment section at the University of Oregon in 2004 while being obfuscated, oppressed, repressed, misled and attacked by evil, fascist and others quick to steal from us T.I. at speed of thought through Remote Neural Monitoring, and never take responsibility for their evils, or even face who they falsely accuse of the crimes perps actually commit using news comment sections and beyond those in the vast data collection of

List of All 149 MKULTRA Subprojects

social media platforms to find, target and torture fellow political dissidents and others has been a unintended consequence of my invention, done by EVIL perps. I am also older than the World Wide Web, which is about 30 years old; I will be the last of all people that can ever say that. The internet is the largest experiment in anarchy the world has ever seen, it's been said. The w.w.w. comes with lots of harmful, evil unintended consequences that gives rise to lives lived worse than death for us tortured T.I., and so many more utils of unnecessary suffering in total for Earth. In about 4 or 5 areas I am top 1% in the world in intellectual matters such as liberal arts areas of education, cognitive thinking, reading comprehension, higher education leadership, finance and administration and some other work too. I've invented some too but don't often talk about my creations, instead my inventiveness and work is stolen; I get ripped off at speed of thought like inventing a recipe for NW Coffee Food (Ensure Plus, drip coffee and sugar),

inventing Digital Dark Age EMF rape prevention devices and the newspaper comment section itself back in 2004 as a new tortured, MKUltra slave, just recently mentioned. I also like inventing new words or innovate on existing ones in Western English, and even that gets stolen by perps. Although I'm a slave, and I was a talented and gifted, special education student in grade school and used my talents well and for good, even in man-made hells. I'm brilliant, and that's not just my mom's parent teacher association meeting, bragging or opinion. I am brilliant by 3rd party, objective standards. I'm a Buddhist Young from Utah, higher education guy who was not allowed to be as good as I wanted to be. I have been tortured out of my birthright to work as I chose to for charity, and the public universities of the U.S.A. In related news, Stephen Hawking was possibly poisoned in school to shut him up as a genius astrophysicist. He didn't shut up. As a top in the world big picture thinker even in my youth, my consciousness has since been interrupted many times nearly every minute since the Bush reelection campaign of 2004, so that I would not be able to think big ever again. I did anyway. In a plot twist turns out we, Bush and I, may share a common notable ancestor in Charlemagne. Also, if the U.S. Constitution and Bill of Rights makes us American, I have not been an American since the graduate dorm room attack on me in 2004 at the University of Oregon, sanctioned and overseen by the secret crossover of mafia and government, run amuck in the U.S.A. and worldwide. To satisfy their selfish, short-sighted, childish, malformed, evil wants and needs here in America and worldwide, these unConstitutional Patriot Act empowered secret surveillance gangs, perps, will stop at nothing and do just about anything thinking they are "gods" among men, who ARE NOT however really are evil, inferior humans. Cheating at life itself, these organized criminal perpetrator gang members or "perps" attacking Targeted Individuals really are the unclean of mind and genome, lying on their backs. Perps are a pandemic worse than Covid 19! These perps sometimes fake they are aliens, or demons, to make us victims even less believable when we report on these human criminal perpetrators who used advanced and not well-known technology to exploit us T.I., and serve evil. Similar to how it is said we have reverse engineered alien spacecraft, perps presumably fake aliens based on the possibly rare Earth interactions with a few REAL ones.

Many Different Parts of the American Dream Have Been Corrupted

The "American Dream" has been corrupted meaning the space-ial, temporal, physical space around 3-dimensions, 5 senses of us humans. The physics/hard science related, weak force theory, electromagnetic force has

been exploited by organized evil within the electromagnetic spectrum around 3-dimensions that we do not often perceive. The "American Dream" has been criminally corrupted in this way in addition to the dream state of mind we individually experience while sleeping. Also, the waking life of hopes and aspirations we all have as human beings worthy of rights, liberty, humane living standards, dignity, happiness and respect are also being stolen, smothered and destroyed by perps. All these parts of the American Dream have been corrupted by these evil, these elusive people and sub-humans and this technology as I write this in 2020 so many days after the Dr. Martin Luther King Jr. National Holiday and decades after his "I Have a Dream" speech. There are aggravated, unhealed wounds of the "American Dream" with so much unnecessary suffering it's hard to even wrap your head around it.

I have been an enslaved body and mind for almost 16 years now in 2020 by the "beast system" and mind control and synthetically telepathy satanism and don't believe in a Messiah and I do believe that the first one was false along with some Jews and others who believe the same thing about what happened 2020 years ago. John McAfee of the anti-virus computer company by his namesake and founding I suspect, is a Targeted Individual also. Often, in countries overthrown and using civil unrest and military tactics, the intelligentsias are first to be attacked before all hell breaks loose so to say,

and/or overt war and/or civic and political powers fall, like the U.S. government which is designed to be overthrown, actually, by our Founding Fathers and not just in periodic elections. Human perps' evils and exploitation of us T.I. are often reported to authorities who don't care, fake they are unaware of the perp system, play dumb or can't help us get our constitutional rights back and/or don't believe us. Police and others are also semi-secretly overwhelmed too by these evil uses of these technologies by organized criminal systems seeming magical, at first. Too many cops are being suicide-d by these gangs, competing with the number of our men and women of law enforcement killed fighting crime on the job. Society for better or worse, puts too much faith and responsibility into law enforcement officials and it is not healthy for them and unrealistic for us as citizens. Cops are too often only a hollow front of civility and law and order and under deeper analysis, only offer the appearance of a safe society when it is anything but even though they try really hard and are generally, good. E.M.F. perps faking cops in human form is reportedly low skill and sadly, all REAL cops take the blow-back or blame and retaliations for E.M.F. perp criminal activity only while faking the form of real cops who were never really cops at all.

I lived to Help Universities and was tortured for Virtuous Political Dissidence

Oregon University System

I became a T.I. for being a political dissident, I served on the Oregon State Board of Higher Education and was Student Body President in college winning an
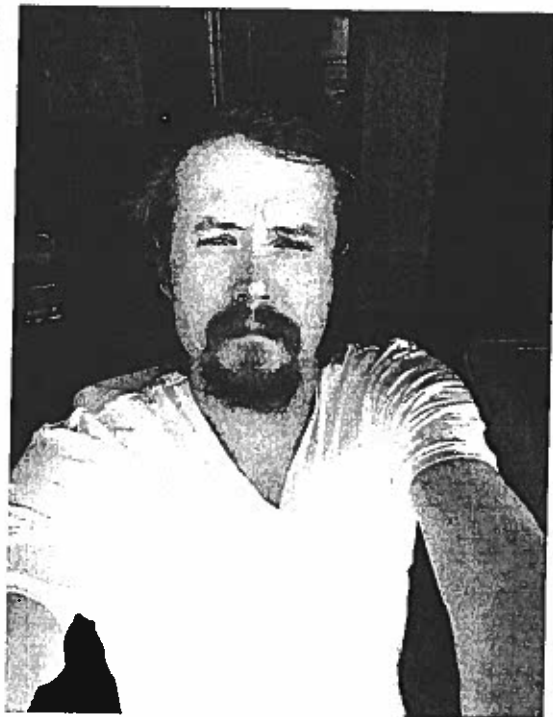
election as a write-in candidate. I am a "goodie good" who is taken advantage of by evil and kept from my life's work for others. I possess advanced degrees in solving the problems of society on behalf of my peer citizens, and focused on the needs and priorities of academia in my life. Since the year of my birth, 1979, public university tuition is up over 1000% adjusted for inflation and student loan debt is over a trillion-dollar industry not dismissive in bankruptcy court, creating generations of indentured servants and punishing Americans for wanting to better themselves through education. Severely attacking on our institutions that embody the American ideal of socioeconomic mobility every budget cycle I fought back against much of my young adult life. Many folks work hard at the American value of social class mobility, now under extreme stress because of the second Bush's administration and their budgets and legislation that is and was anti-Christian, anti-American, anti-Buddhist and anti-western civilization foundational thinkers such as Plato and his teaching on the value of education. Making student loan debt not dismissable in bankruptcy court, making the U.S.A. a country in favor of greedy, short-sighted budgeting and lawmaking that attacks the academy; the second Bush administration still has all future generations of Americans unreasonably diminished and at risk in pervasive, short, mid-range, long lasting and in a pinch kind of ways because of higher education finance in the U.S.A. in 2020. U.S. higher education policy since I was born, and even earlier, has been REALLY BAD public policy. No one should have to kill to get a college diploma, no disrespect soldiers. Post-secondary educators and keepers of knowledge are often the very people that serve as "referees" for society, and society's evils, and ills, not that any of this is a game. I worked to help students who want to better themselves through education and to preserve access to high quality, and affordable post-secondary education even while disabled by perp gangs disguised as me being only mentally ill. I was quickly made a tortured, deep state, organized criminal gang target for prolonged and constant attack to stop my work, passion, hard to come by credentials, and chosen life's path to work for and support the academy. I had the education, smarts, leadership ability, birthright, wisdom, credentials and passion to make a difference.

For example, I worked towards and for Measure 86 in Oregon for over a decade, sometimes writing as 3generations at www.oregonlive.com only to have all the data stolen by these perp gangs, which are no well-armed militia but deviant opportunists, malformed, short-sighted burdens on all of society. The measure was designed to fail around me as a T.I. Voted down in 2013 Oregon's Measure 86 would have created a $6 billion-dollar endowment for Oregon students to help pay for Oregon Opportunity Grants so students
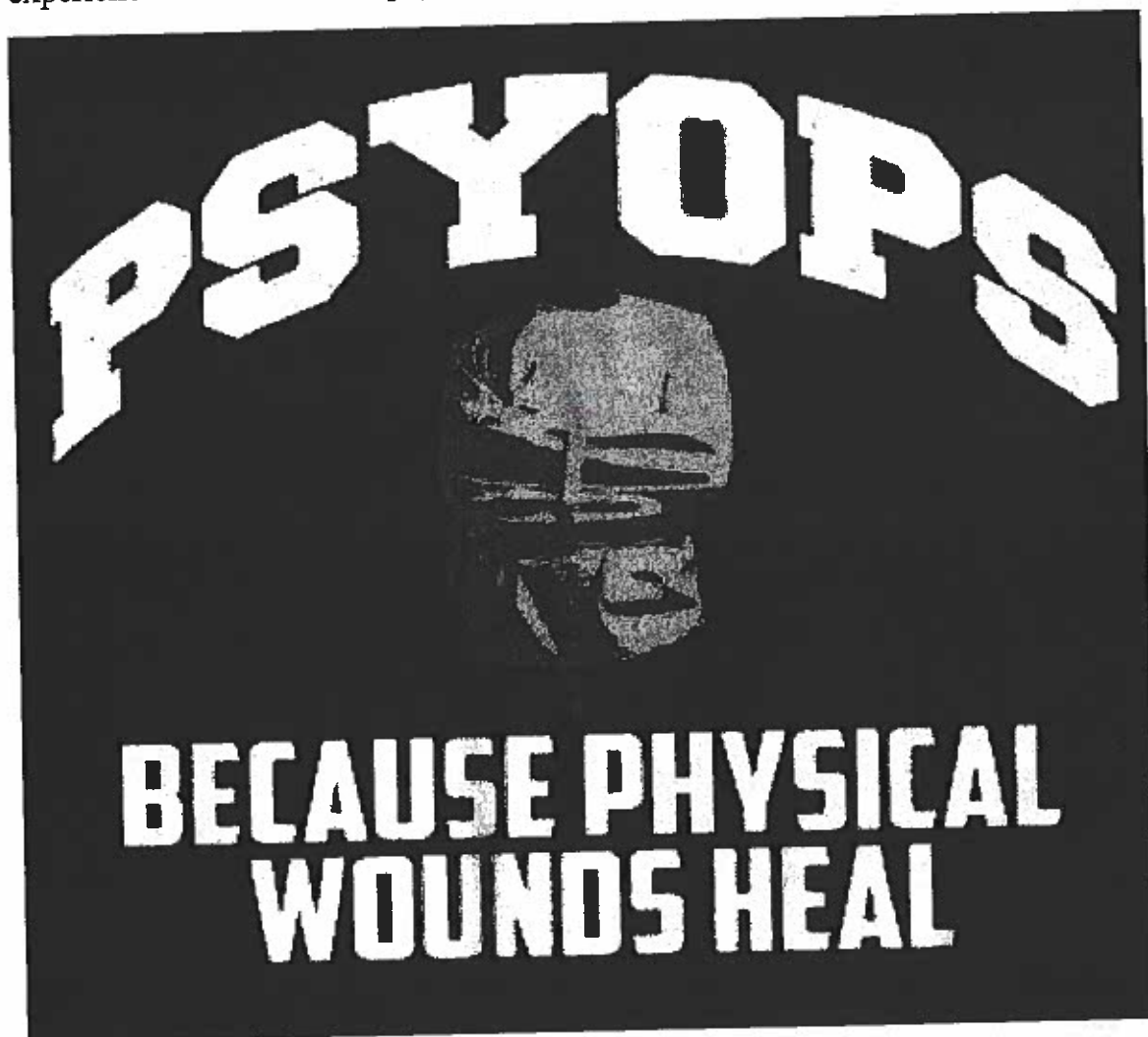
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could more easily attend community colleges, vocational programs and universities. Oregon's 2013 Measure 86 was modeled after the Hope Scholarship Program of Georgia where the principle of the endowment would never have been spent, only the interest it generated. When all else failed and I kept at my life's goals, perps took credit for my work at speed of thought, destroyed evidence, faked evidence and lied in so many ways using sleight of hand and outright black magic, and worse. I went through hell on Earth, literally and not hyperbole in any way, because of my political activism and leadership in public post-secondary education at a young age. Enduring evils like the C.I.A., who enjoy being underestimated and are highly skilled at all the forms of lying and covering up evils and committing crime, I was driven too crazy to know what was happening to me. All the suffering of the 94-page affidavit I filed with Dr. Horton in her class action lawsuit in the U.K. was done and is done to me, by my own countrymen and women but perping is international.

I am a descendant of slavery and central bank opposing Union General &

U.S. President, Rutherford B. Hayes (pictured above) through my mother, and Charlemagne and others, on my father's side. I am a Utah Young, although I am Buddhist by choice and never was Mormon personally many in my family are. Controversially but truthfully in a world of illusions I do feel

"monitor" consciousnesses mislead Mormons in the religions founding, taken advantage of faking Jesus and god back then, while so many were being psychologically operated on, so many GOOD people. I am Buddhist but literally, Mormons are some my family and I love them and want them to be free to explore space and move on too. In 2020 MANY are now being manipulated, hurt and deceived with synthetic telepathy and false spiritualism and I don't mean to single Mormons out, alone. I believe all "gods" in the entire virtual reality universe are false, and that Jesus and god were faked, many others have been misled over 1,000's of years, including myself. I am no false Messiah; a tortured T.I. master of Public Administration is what I really am. I have had fraudulent, false spiritual experiences with domestic psy-ops and false gods in Westerville, Ohio

PSYOPS

BECAUSE PHYSICAL WOUNDS HEAL

August of 2005 involving very human, evil monitors or E.M.F. perps, C.I.A. Project Bluebeam tech, black ops and budgets and me as a Targeted Individual. I am a tortured, domestic, secret, prisoner of war and not trying to start more false religion but "virtual signaling" perps, off the "goodness" of T.I, are trying their best at evils and false religion incessantly and I feel can't lose being willing always to do acts eviler than challengers, human or otherwise.

I was a smart child; I was born 11 years to the day are Bobby Kennedy was shot and my day of birth fell one day before the event of 6.06.06 occurred on the Christian calendar, a once in a hundred and once in a thousand-year event. I have also lived in man-made hells for almost 16 years now in 2020 and was put there, for being good at being good and being worried about the public universities. Our universities are literally the envy of the world in the U.S.A. in 2020. We have the best of the best in higher learning, an asset once held by the ancient Middle East who taught us in Western Europe of the valuable information preserved from the ancient Greece and Roman Empires. In K-12 I was known for loving kindness, being a good reader, having a gift for vocabulary and big picture thinking. I grew up the youngest of five boys. Left to my own free will I would have continued in the footsteps of my father and worked at public universities in some capacity as a second-generation academy employee. However, I was stolen by pure evil disguised as good; perps who fake they are god but are these hyper-sonic, covert, evil, torturous, war criminals that are no different that Kevin Christian's Georgia perps living at Howard Circle in Jonesborough, torturing him as I am tortured. It is algebra, Kevin and I are both T.I. being attacked by evil perps and they are the same kinds of people paid $35 an hour or so to "play" as they say, in ways that include satanic "play' murder plots and worse. Killing humans is not "play," nor is slow killing us a game but perps really do make slow-killing us a game, electromagnetic signal morphine like high in their brains without normal drugs, out of their minds literally and are not stand up guys or girls, literally too. These criminal gangs specifically target against Christian/Buddhist Genome types with propensity towards natural heavenly virtue and aversion to sin, like myself and many others. Again, I am Buddhist by choice. My Lord was not a god, or a professed son of god. He was the son of a king in India and sought out non-reincarnation and taught of non-reincarnation.

I Am Being Slow Killed by Evil

I suffer extremely and have for a long time. Many T.I. die "in the program" treated as terrorists unjustly by the secret thugs, tortuous and heathenish F.B.I. Fusion Centers, some of the most unconstitutional organizational bodies in the U.S.A. run by liars and law enforcement badge protected criminals themselves. A correlation and causation analysis of EMF perping, the InfraGuard, the Department of Homeland Security, the C.I.A., the N.S.A. (Nation Security Administration) and the F.B.I.'s COINTELPRO, the Secret Service, Et. Al. and what I call the "Make a Wish Foundation for the criminally insane" a.k.a. these perp criminal perp gangs these government alphabet soup agency groups allow and support against the T.I., using their EMF perp microwave and/or ultraviolet spectrum people and contributing to the world's problems, would yield definitive proof how evil perps and those that support them really are, done from the perspective of objective reality which none of us are in. A Strict Constructionist view of the U.S. Constitution might be right in arguing successfully all these federal "legal" agencies are unlawful and absolutely unconstitutional. I believe in no "god" above the Constitution because there never was one but perps have assumed the position, for real and it's a real hell for all of us.

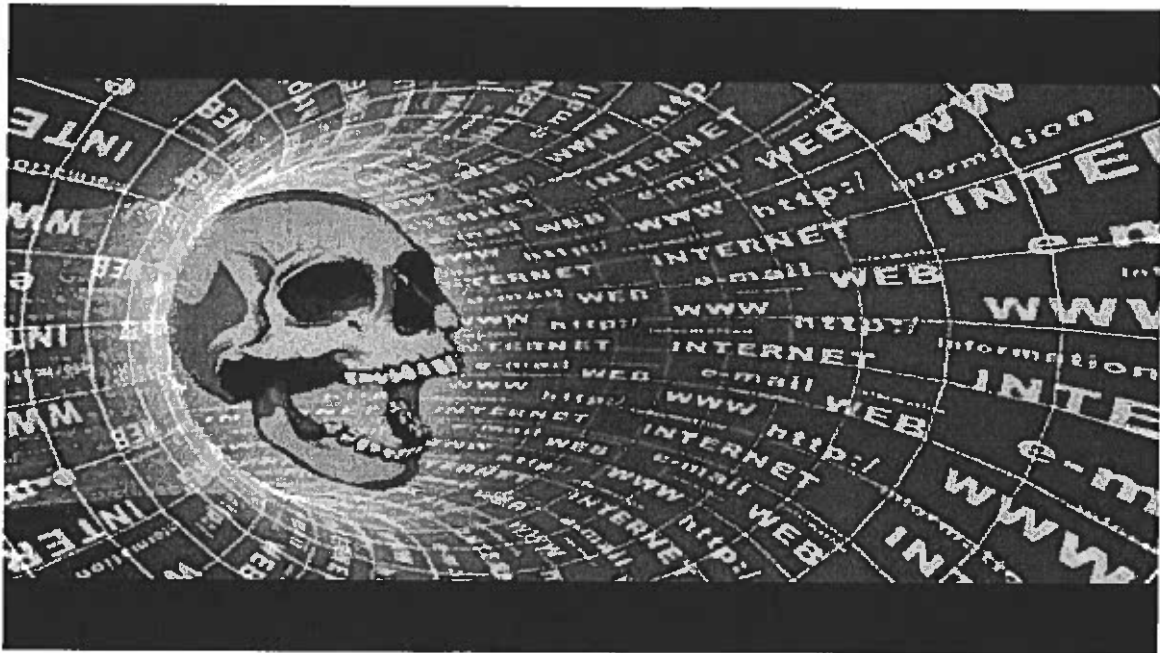From 2004 to 2016 my family and I were purposefully confused and misled

VOICE TO SKULL

about the crimes against me, masked as mental illness only. Even my medical records are being altered. Perping is a system of secret torture. So many excellent souls like dentists, good cops, military personal, the youth and the elderly that are driven to suicide in the dishonorable "Barbie Pink Corvette version of murder", a name for what I call killing through remote suicide-ing real human beings through Voice to Skull torture, Remote Neural Monitoring, Image to Skull abuse, street theater, implant torture and worse. Like I suspect of Aaron Swartz's death, the Targeted Individual system makes our deaths as T.I. look like suicide, when it is really murder what happens to us. From very evil thought censorship in the minds of Targeted Individuals and illegal memory wipes, to death threats and nearly actually dying from perp attacks; I have been severely exploited and abused for 16 years in 2020 disguised as only mental illness, as I have revealed. My genitals have been remote controlled for sexual humiliation coupled with street theater, and even limbs of mine have been remotely moved by perps. It is a mental illness what is done to us T.I., but it also is so much more in terms organized crime overlapping with government and enormous corruption, and is being done to us T.I. by forces external to our person-hoods, as revealed earlier.

What is done to me as a Targeted Individual is unholy and Un-American The Patriot Act and 9/11 false flag attacks that tricked us into giving up our rights, tricked us into the wars in the Middle East we done using similar systems and technologies used to deceive me, all too often. Those were

weaponized and specialized projectiles with Project Bluebeam holograms of commercial passenger jets wrapped around them that hit the twin towers of the world trade center, I believe. Who sent them? Well, who benefited from the American response to 9/11? I've suffered every day since Bush's election in 2004. I've never been compensated for any of my work, inventiveness or harms done to myself and my nuclear, and extended family. I was stolen and needlessly tortured as we were tricked into sending our pride and joy, our youth and other soldiers, to those wars in the Middle East. Again, sexual humiliation, extreme misleading including sensory deception and trauma are some of the goals of E.M.F. form perps on their www.openbci.com hardware and the B.C.I. chair, a more powerful version of this deception technology and mentioned earlier, speaking directly in the auditory cortex of a target's mind using N.L.P. repeated statements for brainwashing, mind control and destruction of will to live. These are part of the goals of the torturers, in addition to keeping the target off balance and internally suffering every minute, of every day in this covert, domestic war where we T.I. are nearly helpless at the mercy of sub-humans psychopaths and not fake god to stop them, not god at all but many are misled in deliberate error to think their perps are Jesus, or even Buddha with Image to Skull deceptions (I.2.K.), Voice to Skull deceptions (V.2.K.) and Synthetic Telepathy.

Neuro Linguistic Programming (N.L.P.) can kill; N.L.P. can drive suicides when unnaturally spoken directly into a target's head. The undue influence of this mind control and technology and systems can get just about any target to do what perps want them to do, in secret subtle ways. These physics weak force, electromagnetic and remote torture capabilities not known to most of the public that many mistake for our own free will, is actually the destruction of free will and sanctity of the human mind and body, go so against Christianity it would make your head spin, figuratively, and literally anger you extremely. This info might make you feel helpless and that is what perps want and an after-death evacuation plan in my personal goals that I will discuss later. These perp voices aren't god! Voice of god technology or V.O.G. is not nor will it ever be god and that is all there is or ever will be; all "gods" are false, especially in a proven to be, V.R. universe. I have had faked, hologram, black, unmarked helicopters over my apartment in Portland, Oregon in 2016 over some Tweets. No s$%^. Really! These perp "solutions in search of problems" tried to overkill me, over some Tweets!?! Mind controls in these ways are unholy, unconstitutional and are

galactic, maybe universal crime in my humble opinion especially in a VR cosmos; we just do not know to remember that between illegal memory wipes at the moon, after death how evil all this taking advantage of us as a species really is. All of what has happened in the Targeted Individual systems against us is Armageddon, Apocalypse level SERIOUS AND DANGEROUS, good vs. evil on an epic scale. Allegedly all the branches of the military have their own Voice to Skull (V.2.K.), a crime against creation itself and never intended by creation no matter what any General has ever said, or will ever say, about changing hearts and minds publicly, or privately. Voice to Skull (V.2.K.), Image to Skull (I.2.K.) and Synthetic Telepathy is not protected speech, an understatement. It is a real hell, and much worse than yelling fire in a movie theater. The Supreme Court of the The United States of America might agree with me. These tactics and crimes against us T.I. are prolonged torture, terrorism and severe undue influence among other transgressions and MASSIVE LAW BREAKING, kept too secret for too long in darkness and not the sunshine light of day of public understanding. This has allowed for festering, unhealed wounds of multiple definitions of the corruption of the American Dream, as I have explained. The world and this, billions to one proven to be virtual reality universe is rigged pro evil, in favor of and expert in evil, heavily weighted, super sadly and it is SO UNHOLY. Does this make a Kardashev Scale Civilization of some sort that allows the virtual reality universe to exist, evil also? Is all of

existence, as we know it an experiment? In objective reality which none of us are in, what can be said of all this evil on earth and in the cosmos? Please see Philosophy Departments of the world at .edu websites or in person for universities' full definitions of the one word, "evil" to know better what we are up against as Targeted Individuals versus perps.

Secret organized criminal activity like electromagnetic form perpetrating is designed to stay out of the courts and is possibly, or likely, or definitively using the weak force in physics to destroy the human condition used to torture men, women and children to slow-kill death, 24 hours a day. I was driven too crazy to know the Secret Service, C.I.A., Department of Homeland Security and National Security Agency (N.S.A.) and others ALLOWED organized and obsessive criminal gangs to take away my quality of life, liberty and pursuit of happiness, constitutional rights and protections while in graduate school for a Master's in Public Administration at the University of Oregon starting in 2004 fresh off the Oregon State Board of Higher Education, as a student appointee by the Governor. Many C.I.A. projects have been used to degrade, decompose and derange myself since my early twenties and college activism days being a wonky, blue state, public policy advocate, researcher, leader, expert and second-generation higher education employee as addressed, because of these perp gangs and their evils. I have been exposed and exploited by Project Bluebeam, MKUltra, BlueBird, Mockingbird, Monarch attempts and failures and more of the C.I.A. projects than I know, or can list; it's a real hell. Child endangerment and the F.B.I. Fusion Centers are corrupted, unConstitutional and fully satanically working with the C.I.A. had me propositioned by monarch child sex slaves and/or E.M.F. perps, evil, fake, holograms with no soul, posing as kids. I rejected all these evils, and was wickedly traumatized by the attacks and others. Having been mildly molested as a child, these were beyond horrific, repeated child engenderment crimes committed against me and real or faked kids! Rejections of such sick crimes I kept up over and over, all while perps were a trauma-based mind controlling me, E.M.F. perp rectal torturing me, Voice to Skull (V.2.K.) sadistically destroying my life, and worse, all captured and corroborated in Dr. Kathryn Horton's 94-page affidavit of many of the ways we T.I. are tortured, available for inspection at www.stop007.org and www [dot] timdyoungbsmpa5 [dot] wordpress.com.

False messiah satanism and the New World Order

Project Blue Beam
The Four Steps To Global Domination

I want my Constitution and Bill of Rights back and to not be terrorized by nameless, faceless, evil human beings or their robot army of internet beings of light. Unclean genomes of psychopaths, sociopaths and narcissists and other evils that had early access to the B.C.I. technology and used it to become a biohazard, human-trafficking, invasive pandemic across the globe! Duplicitous, deviant perps, double speaking, double standard, malformed and mal-forming, juvenile, stunted, satanic mimicking, weaponized irony of satanic disrespecting, satanic topping (speaking into the heads of T.I. as fake gods but really are evil people) mind controllers using repeated N.L.P. that makes a target want to die and mind control (V.2.K.) suggestions used by perps from sped up consciousnesses themselves are a global threat. Evil perps use satanic mocking, satanic misdirection, identity theft in "virtue signaling," sleight of hand and other evil uses of advanced technology that allows for mind reading, has the world in the grips of the dreaded New World Order, ALREADY SECRETLY SUCCESSFUL. Perps are satanically proud of their unholy virtues. Perps are able to travel to anywhere in the globe and break into any building or structure undetected with these technologies including Project Bluebeam. Freewill over everything from love in a partner, to choices in candidates or restaurants are being muted, manipulated and rendered into nothing. Subtle, secret, total individual control technology is alive and well in no good ways, and is being

used every day by "beast system" operatives, electro-corps members, community-based agents, the psychopaths at central command making up hollow excuses for their evil, pathetic lives, and work treating us their fellow humans beings, worse than wild animals or food. Hypocritical, and pathological lying criminal gangs of perpetrators, spend day and night trying to transfer psychological responsibility for their evil onto vulnerable Targeted Individuals, like myself. Perps make me three kinds of mad some days. Perps use psychological projection and even holographic projection in addition, to falsify evidence and abuse Targeted Individuals and make up reasons for the abuses of T.I. and also using virtual drive, virtual machine computing to commit crimes in 3 dimensions that we T.I. often can't even perceive. I am perp'd by "stupid smart" or smart at faking stupid men, women and

PROJECT BLUE BEAM

youth incapable of superego function, love or remorse in many cases that excel only at being evil, or just about. "Virtue signaling" off T.I. they think will cover their tracks and can't think past their successful plans to steal the world's brains. Then what, more hells on earth to be reincarnated back into? Is that the stratagem for earth? A suffering farm?

WHY DO THEY USE VOICE-TO-SKULL?

1.) TO COLLECT INFORMATION FROM VICTIMS MINDS (BY TALKING AND RETRIEVING INFORMATION TELEPATHICALLY).

2.) COVERING VOICE-TO-SKULL TRAFFICKING (TALKING IN VICTIMS HEAD TO COVER HUMAN TRAFFICKING WITH VOICE-TO-SKULL) SOUNDS COVER OTHER SOUNDS.

3.) CONFUSE VICTIMS.

4.) TO DISTRACT VICTIMS.

5.) TO IMPERSONATE VICTIMS (SPEAKING FOR VICTIMS).

6.) TO MAKE VICTIMS LOOK MENTALLY ILL.

7.) TO BLACKMAIL & THREATENED VICTIMS (EXTORTION).

YouTube/phirewerk   facebook/menofdepravedminds

Electromagnetic Perps (criminal perpetrators) invade our bodies, homes and communities for remote torture, raping and pillaging who I can't even locate alone as a non-citizen being a Jew in Nazi Germany by historical comparison, as an American Targeted Individual in 2020 kept poor, unarmed, without defense and my mind read by evil. I've often secretly seen perps as less dense, translucent "hollowmen" who follow me around and invade my homespace. The F.B.I. won't even return my calls yet, and even medical records of mine are being altered to falsify evidence to justify me kept being tortured as I am falsely accused of their terrorism, perp terrorism and worse. Pride will be their downfall, it's been said historically. A true statement, would you agree? Deflection, deception, misdirection, sleight of hand, black magic enabled by evil technology uses, and extremely dangerous misleading are the modus operandi of these criminal, human trafficking gangs passed out catatonic in their own feces in other locations from where these crimes are committed as I have already alerted you the reader to. The torturers of me for 16 years this 2020 are perpetrating evil crimes at me in the Oregon State Hospital, right now. I don't fear my attackers as I write this

to you, I make fun of them as a matter of Dialectical Behavioral Therapy changing my emotional response to a persistent unsolved or unsolvable problem. Often, I can't stop myself from making fun of those perping me and am REALLY funny. It gives me great joy, frankly. However, I really am a secret domestic American prisoner of war (P.O.W.) with no Constitutional or Bill of Rights protections, stripped from me and 1.5.-2 million Americans of our 347 million domestic population and I estimate there are about 5 million perps doing all this evil. Many of whom of my fellow T.I. are driven too crazy and mislead to even know that what we face is both mental illness, AND organized crime.

The World and We Targeted Individuals Are Being Deceived and Needlessly Tortured by Evil

Torture does not make anyone any safer, as previously asserted and that statement is backed up by a lot of good research thanks to journalists and Americans. That's an important point worth repeating. Further, perps faking that they are aliens or famous people in the perp industry is common practice and nothing is holy to them. I was lied to in an attempt to fake Mormon Prophecy possible that I had earned a sin free world. There are no real angels, but the deception of this technology and being able to take any form perps want, mean there really are REAL DEVILS who are different people than they present themselves as with real, dirty bodies, catatonic, in other locations who are cyber-genetic possibly, holographic, Project Bluebeam fake people in front of us who can't really be killed at that location in technologically astral projecting
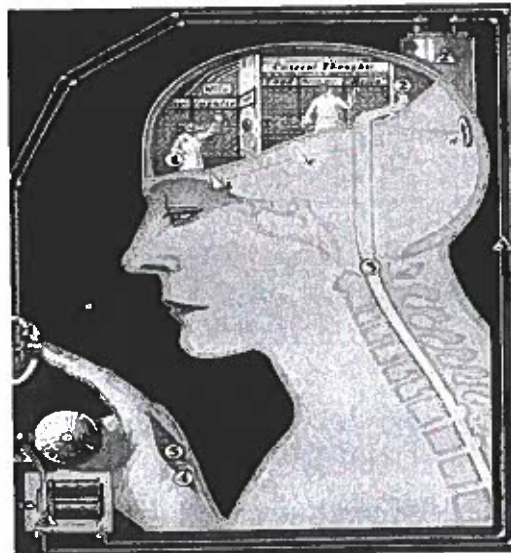
form, as I've explained. I am no angel and there are really no such things, only fakers. There are E.M.F. real devils faking angels, and that's all they ever were considering the memory wipes at the moon. However, I am a Master of Public Administration and student and researcher and writer on the field of charity, our 3rd sector in the economy and I'm a good soul. I could accurately be accused of doing the work on behalf of what civilizations past could have called angels' work in the public university sector, pro bono. My career was not allowed coming out of the second Bush Administration and I can't stress enough though that there are no real angels, only parasites perping good people from beyond 5 senses, and 3-dimensions in the electromagnetic frequency around us and trying to do things like steal good peoples' identity, and lives, at speed of thought with synthetic telepathy crime. I like charity sure but really, I am a stolen person, a slave, and it is ALLOWED. I'm a slave of the worst kind, for the slave. The website www.onceand4all.com more or less, happened to me.

I have heard from my aunt, who is also a T.I. and part of the inter-

generational targeting of my family, of an innocent 72-year-old T.I. who got an audience with the F.B.I. over being put on the terrorist watch list being made a T.I. The feds also put an Oregon State Board of Higher Education member on it, me, and were allowed to torture me sacrilegiously, literally,

and ruthlessly and incessantly since 2004. The F.B.I. agent told the innocent 72-year grandmother she "was not supposed to be on this list" and that it's hard to get off of". The F.B.I. won't even talk to this white slave, 16 years into the unconstitutional tortured of me! TVs in rooms I am at have satanic Project Mockingbird of the C.I.A.'s family jewels of evil capabilities talk to, and at me, for attacks on me and misleading the target audiences around me. Project Mockingbird is further evidence this is not only mental illness but external to my person-hood and massive crime, deceptions and extreme evils. Satanic Project Mockingbird A.I. (Artificial Intelligence) of the C.I.A. has already put my life at risk literally and tortures T.I. from the Americas and Canada, to the U.K. and India too, anywhere. Virtually anywhere on Earth the vampire squid, N.W.O. (New World Order) octopuses' tentacles can go that Mockingbird can also go too, hypersonically. It can turn populations into lemmings with Mockingbird misleading them to their literal own deaths and other evils like killing T.I. Efforts to keep Targeted Individuals isolated and abused, mistreated and experimented on as human capital, who are monitored by who should not be trusted, and turned away from who should be trusted by manipulations of free will and total individual control covert technology, keep T.I. constantly unable to organize to address their grievances of government and these mafias they intertwine with. Conflation, a deception tactic used all too often in the psy-ops of my life, is used to confuse Targeted Individuals and the Target Audiences; an example being the son of god conflation purposefully, deceptively combined
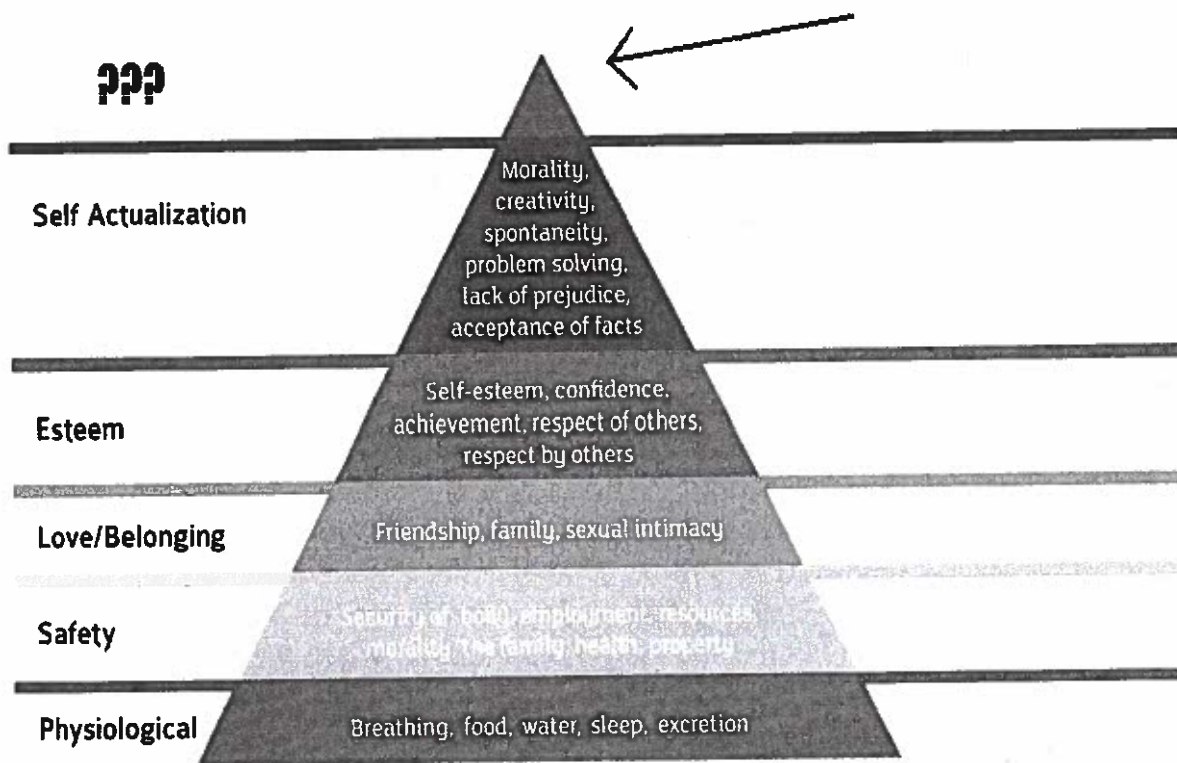

Free Will?

and confused with the literal sun, the solar body that we all rotate around as earthlings. Please see the Zeitgeist movies for more info on this example of satanic doublespeak used to take advantage of the uneducated, us slaves that all of us in 3-dimensions and 5 senses, really are. I am just more aware of being a slave because I am a T.I. Also, false confirmations schemes are a deeper concern with the 30-year-old world-wide web and the complications it brings in information warfare. Attempts to frame me for active shooters being triggered by perps that have had advanced information on from remote torturing people into committing murders, have occurred in addition to falsifying medical records and other crimes to try to make me a patsy, or to take the punishments for perp crimes as I have revealed.

Dangerous False Religion, Terrorism and the Same Plot to Enslave Every Man, Woman and Child

The shadow government which the Targeted Individual system is an obsessive evil and even a matter of addiction with perps on morphine/heroin highs while torturing us T.I. laying on their backs on B.C.I. hardware in other locations swimming in their own pee, addicted to the evils of these systems, using virtual machine computing to commit crimes against T.I. unwilling to wake up and stop attacking myself and the Christian/Buddhist natural genome in general and our nurturing social institutions, writ large. Perps have also faked two suns in the sky for me and other T.I. using C.I.A. Project Bluebeam hologram deceptions. I have been V.I.P. perp'd by faked celebrities too. I refuse to be only a statistic of these many evils perpetrated on us Targeted Individuals. When the Buddha beat mara, the Buddhist satan the Buddha touched the ground while saying "the earth shall be my witness" and there was a reported earthquake. I know that in 2020, that was a Direct Energy Weapon discharge and the earthquake at Jesus's death was likely a Direct Energy Weapon discharge (D.E.W) too, in a proven to be virtual reality universe. Mortal man can cause earthquakes with D.E.W.s with technology, in 2020 allegedly. Jesus was misled sadly and thus was misleading in my humble opinion. It's been done to countess others. The tricks played on Jesus, and all of us, like the idea the curse of eternal life that we all have was a gift from him and who talked into his head, or who basically perp'd him back then and that eternal life was not a curse we all had to begin with is not a matter of opinion to me, as an aspiring Buddhist Arhat who knows he is living in an EVIL virtual reality universe, a simulated universe. The evil still here on Earth has an army to fight a false god from 2020 years ago and already won; I was just too unaware to know the full extent of the beast system. The technology used on me is very dangerous and is undue influence and false at
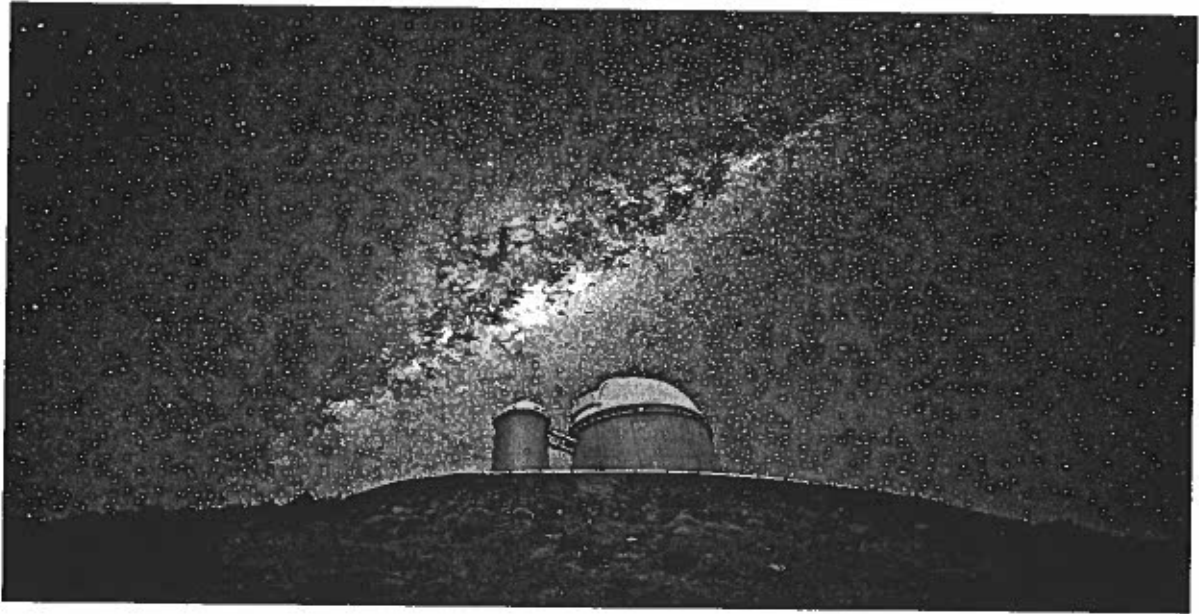
core; in the first 2 or 3 times a Christian gets an (I.2.K.) Image to Skull abuse of the image of Jesus in their minds, they 90% of the time are misled to think that idolatry image is actually literally Jesus, reportedly. It's never going to be Jesus, only extremely evil human traffickers taking advantage of the flock with technology. I am denied basic needs as an obsession by these perps, detailed in Maslow's Hierarchy of Human Needs (pictured). Somehow, I still persist because of my own effort as a single human being.

???

Self Actualization — Morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts

Esteem — Self-esteem, confidence, achievement, respect of others, respect by others

Love/Belonging — Friendship, family, sexual intimacy

Safety — Security of body, employment, resources, morality, the family, health, property

Physiological — Breathing, food, water, sleep, excretion

Earthlings Might Want to Evacuate Earth after Death

Further, I have observed Brain Computer Interface cyber-genetic terrorists, and torturers separate their consciousness from their human bodies alive while using electroencephalography caps and chairs B.C.I. hardware and have concluded life after death, and the curse of eternal life, is that much more likely. Similar to how ice or slushy ice water can transfer form as matter into steam, so

too do I highly suspect consciousness lives on after body death as a state of matter change. It is said nothing is created or destroyed in existence, as a matter of scientific theory, not religion. Our souls might be a form of the physics "weak force" and not much weak at all, despite the name. Reportedly there are a few ounces or grams that disappear at the moments of death for all of us, no matter our size or age that could be the "weak force" of the physics part of us that lives on

after body death. I will try to avoid getting pseudoscience-y and am no expert in the hard sciences but am a social scientist, masters level training. I am also an aspiring Buddhist Arhat, not a Bodhisattva. A Bodhisattva is said to be a human who chooses to reincarnate out of love and/or to teach fellow humans. I and others recommend Black "Swiss Cheese Hole" portals after death at a distance from earth and the moon in space. The portals reportedly have depth in space at a distance from earth to escape the solar system after death, passing on the "life review" and forced reincarnation and memory wipe, white (or other colors) "tunnel of light". The allegedly moon based "tunnel of light" is a sophisticated hologram and suction system close to Earth that can fake any deity and/or loved and trusted person, and read your mind to mislead us all into unholy reincarnation back here on Earth after a "life review" movie of sorts or a kind at our moon. The moon is not what it seems. I have faced similar deceptions and systems alive, and will have been beer prepared than most to evacuate. All this is some of the evilest anything, not known to man that is, forced reincarnations after memory wipes. We simply forget the unholy forced reincarnation by true evil, never going to a promised Heaven in satanic misdirection of that being some other "place" other than states of Nirvana achievable here on Earth achievable with B.C.I. computer code, I deeply suspect. Black portals, faked people and the evil moon are not new information but known in hard to know research areas, or pejoratively stated "conspiracy theory" topics in spoken conversations and

documentations online, and off the internet. The evil "tunnel of light" associated with the moon close to the earth that one must turn away from and think/move into the darkness of space to avoid forced reincarnation, has been possibly set up by what has been termed an "alien invasion force" that I can neither confirm nor deny. Never before felt senses of love, like a magnitude more used to cloud decision making at moments of death I experienced alive and can be achieved with B.C.I. computer code, that should be made available to everyone in the world. The magnitude of love increase Brain Computer Interface computer code has definitely not made available to all earthlings so far because of these criminal gangs and human traffickers and pure evil disguised as good. Consciousness body-less, is suspected to be similar to a dream/nightmare state of mind. I recommend the Tibetan Book of the Dead for study of Bardos, a state of mind between awake and asleep we all pass by each morning but rarely are conscious of that a fraction of second in, much can happen. Bardos are thought to be similar to the state of mind at and after moments of death; a dreamlike, mind manipulate-able, even nightmarish 2 dimensional less dense, sub-reality used to exploit us and trick us from in 3-dimensions life now, all around 3-dimensional 5-sense life 24/7 not needing sleep as E.M.F. perps. After death is possibly similar to interacting with

The Three *Bardos*:
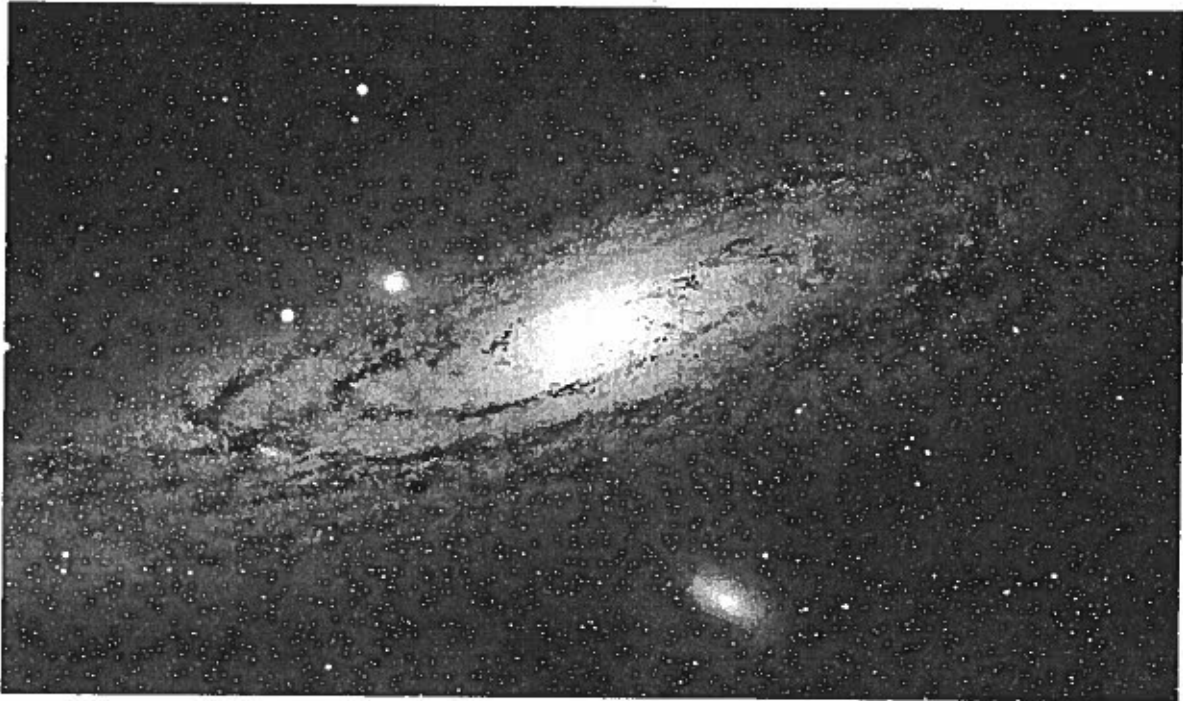
- *Chikhai Bardo:* the bardo at the moment of death
- *Chonyid Bardo:* experiencing of various realities, represented by various Buddhist forms
- Whether wrathful or peaceful, the forms are projections of the soul's own illusion
- *Sidpa Bardo:* the bardo of rebirth after Judgment

those that can technologically astral project now while alive, and again none of this is "spiritual" as stated before; it's tech faked spiritual and real evil.

Moments of death misleading of us all deserves much study and testing as best we can as good, honest people. A Buddhist monk presented with two roads, one that seems longer and harder but is better in the long run or a shorter, easier seeming road that is worse overall is similar to what all 7 billion of us face at and after moments of death, I also suspect. I choose to not reincarnate or get tricked into it, and that is more likely what happened to many Bodhisattva or otherwise, we are tricked at and after moments of death into reincarnation I suspect. An earth evacuee after death may want to visit dis-incarnate civilizations of the Orion Nebula or seek older civilizations towards the center of the Milky Way Galaxy that Walter Baade in the 1940's discovered is where the older suns are, and I will add possibly the older civilizations are too, towards the center of our and all galaxies as a rule of astrophysics, and as a matter of discovered logic. Having formed much earlier our galactic center, and also possibly much older civilizations close to there, may be the best hope in seeking ultimate freedom from incarnation and suffering in a proven to be virtual reality (V.R.) universe. The technological singularity foretold by Ray Kurzweil hit me hard in 2016. I almost died at the hands of the E.M.F. perp gangs that invaded in Tualatin, Oregon. I still am very much tortured in 2020 by psychopaths, sociopaths and narcissists on my R.N.M. every day and night that I can't confirm or deny are 100% sub-human with no real human body like my own to "log out" back into after torturing me for weeks, month, years and decades on end.

Further Reading and Reference

For further research I recommend Targeted Individuals found on YouTube, Twitter and elsewhere like Ramona D., Todd Giffen, Project Camelot's Kerry Cassidy, David Icke, The University of Washington concerning electroencephalography caps and uses of said B.C.I. equipment that is being abused drastically but not by U of W, John Lear, Kevin Christian of Georgia on YouTube, James Lyco, David Wilcox, Timothy Trespass, Richard Bruce, Wes Penre, Deep Thought News, Dr. Kathryn Horton, Project Avalon, Phillip Walker, the Zeitgeist Movies, the documentary "Seattle is Dying," and the movies "Wormwood," "They Live" and "Gaslight." Also, I recommend myself for reference on hard to know research areas such as Targeted Individuals, perps, and sinister plots to steal the world's brains and
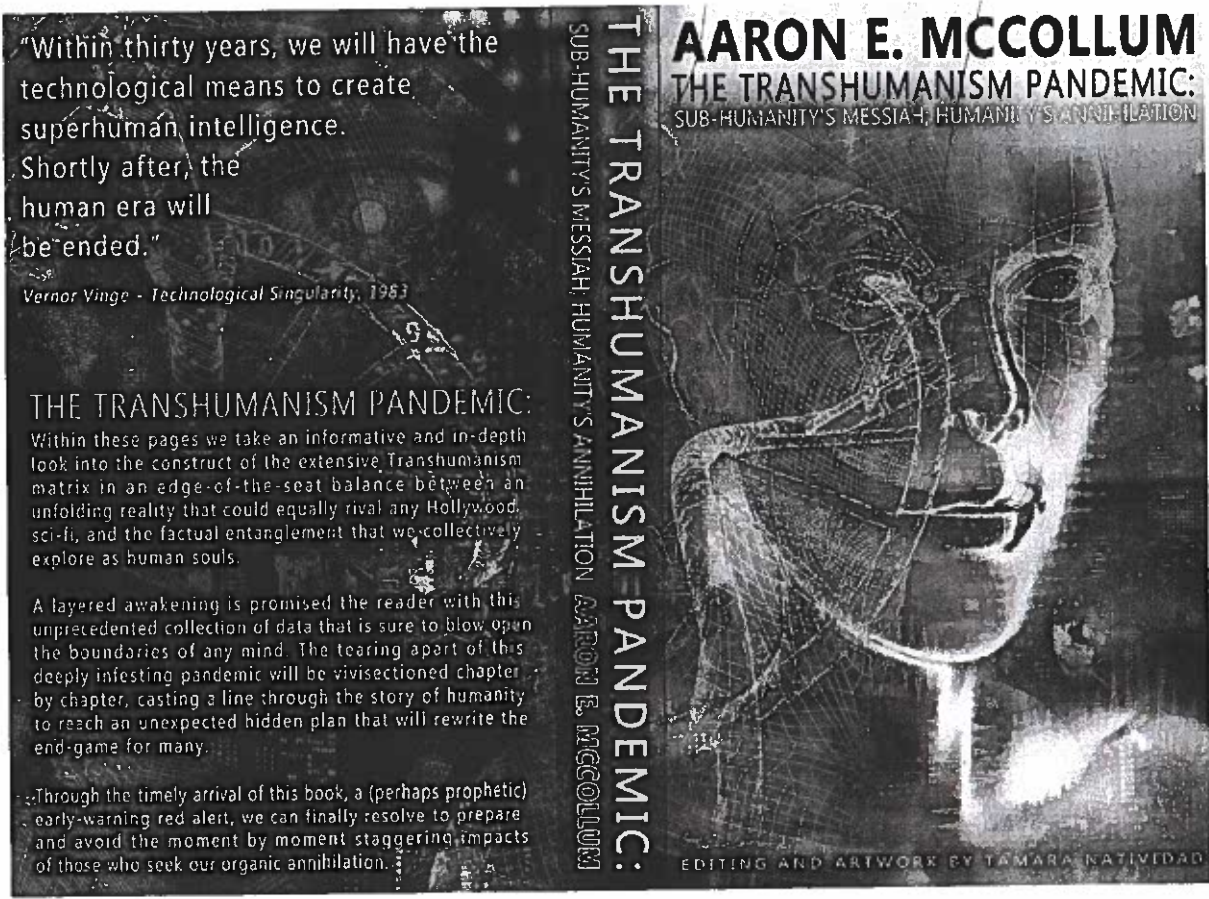
our bodies and souls along with them even after death I deeply suspect. Please know even though I try to always tell the truth I get lied to and repeat the lies I am told, not knowing they are lies. Keep that in your considerations as a disclaimer even if only as an after-thought. I also recommend Transcendent Man by Ray Kurzweil, The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power by Shoshana Zuboff, Guinea Pigs: Technologies of Control by John Hall, Project: Soul Catcher: Secrets of Cyber and Cybernetic Warfare Revealed by Robert Duncan, Aaron E. McCollum's The Trans-human Pandemic: Sub-Humanity's Messiah, Humanities Annulation, The Art of War by Sun Tzu I recommend to all T.I., and all other members of the public concerned for us and themselves against the evil will and

actions of perps with such unholy, un-punished malice for us T.I. and don't care about anyone but themselves and/or their evil gangs or the evil consequences of enslaving us all. We T.I. a system where human suffering is the currency and our pain the enjoyment of too many; Dark Journalism topics that may figuratively peel the paint off your walls may also help you survive especially if you suspect you are a T.I.
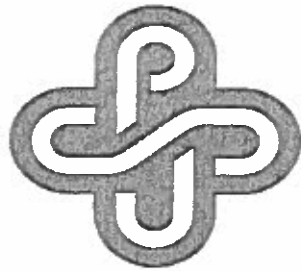
In Conclusion

As a young man preparing for a career, able to REALLY do something good about preserving and furthering a high quality, affordable and accessible higher education for my countrymen and women I got my proverbially public service "wings clipped" by the deep state and other moving parts of

"Within thirty years, we will have the technological means to create superhuman intelligence. Shortly after, the human era will be ended."

Vernor Vinge - Technological Singularity, 1983

THE TRANSHUMANISM PANDEMIC:

Within these pages we take an informative and in-depth look into the construct of the extensive Transhumanism matrix in an edge-of-the-seat balance between an unfolding reality that could equally rival any Hollywood sci-fi, and the factual entanglement that we collectively explore as human souls.

A layered awakening is promised the reader with this unprecedented collection of data that is sure to blow open the boundaries of any mind. The tearing apart of this deeply infesting pandemic will be vivisectioned chapter by chapter, casting a line through the story of humanity to reach an unexpected hidden plan that will rewrite the end-game for many.

Through the timely arrival of this book, a (perhaps prophetic) early-warning red alert, we can finally resolve to prepare and avoid the moment by moment staggering impacts of those who seek our organic annihilation.

AARON E. MCCOLLUM
THE TRANSHUMANISM PANDEMIC:
SUB-HUMANITY'S MESSIAH, HUMANITY'S ANNIHILATION

THE TRANSHUMANISM PANDEMIC: SUB-HUMANITY'S MESSIAH, HUMANITY'S ANNIHILATION AARON E. MCCOLLUM

EDITING AND ARTWORK BY TAMARA NATIVIDAD

the beast system. Even remote torture disabled I still worked for and studied university focused charity in my young adult life. However sadly, the same plot to enslave every man, woman and child has only got qualitatively and quantitatively worse. There are more human slaves, of so many kinds, alive today than in all of recorded history. I studied Domestic Political Science,

Portland State UNIVERSITY

Foreign Affairs and Political Theory in my undergraduate in Political Science and hold a Master's degree in Public Administration. I studied at both at Portland State University and finishing at the University of Oregon with two degrees. Being a "Double Duck" is rare, meaning I hold two degrees earned in Eugene, Oregon. The University of Oregon Ducks are the 250th ranked university in the entire world. Oregon hasn't even been a state that long and we are some of the best of the best worldwide, already. So am I. #GoDucks #ScoDucks #GoViks #GoLakeridgePacers. Even after the limits of language have been reached, wisdom from experience of hard to know research areas and the great unknowns of life on Earth and beyond can at least in some limited ways be communicated to others, is a hope of mine.

Our birthright lives are taken away by the Targeted Individual system leaving us T.I. treated worse than merely entertaining and tortured livestock by these evil surveillance gangs who are sometimes cyber-genetic, hologram faked people that are extremely hard to distinguish from others who are flesh and blood and/or robotized people, who sometimes don't know they are only robots. That has been my experience. I've seen old associates from k-12 that still looked like they did in high school some 20 years later. John Lear

warned of the electroencephalography cap and chair enabled "fake people" problem many years before the tricks were used on me. I was a write-in winner of a student body president election at Portland State University in the late 1990's; no one had done that at such a large university before, or since. I was in an article in Newsweek about it. That is when I suspect I first became targeted and because my leadership and even genome being related to great men such as Johnny L. Sullivan bare knuckles and first gloved heavyweight champion of the world for boxing, Charlemagne, U.S. President Rutherford B. Hayes, the Utah Youngs' family tree, and many others as previously revealed. I was nearly killed by these evil perp gangs and for better and/or for worse I have been through a process of desensitizing at great expense to my quality of life however allowing me to somewhat endure more these tortures and evils. I had a Kundalini Experience in 2013 and I have seen fake reptilian humanoids, also called naga is my Lord Buddha's time. I've seen two suns in the sky, a trick using Project Bluebeam that can fake lots of different people, places or things. I've seen a person who was faking they were a cyclops and met a suspected other T.I. who had the same trick done to her. I've seen talking animals and all of it was deception, lie and tricks with tech and my human body. In related consideration something as harmless seeming as humor has been deadly weaponized in these covert, undeclared wars and Remote Neural Monitoring and Gulf War Syndrome are considered by some to be aspects of the same war crimes. What we T.I. endure has been called 4th generational warfare. We Targeted Individuals have had a rally recently for our rights in the capital of California, Sacramento in 2019. Many of us T.I. are sensitized and distracted, confused with this situation being both mental illness and done by organized crime. The general public thinks we are ONLY crazy, even psychiatry staff falls into that false dichotomy. The concepts are in fact not mutually exclusive, being crazy and being a T.I. It's both. Those involved in perping and getting perp'd are the military, intelligence agencies, evil humans and trans-humans/sub-humans, microwave and/or ultraviolet spectrum form people existing beyond the naked eye's perception, gangs involved in massive sin, satanism and more. Criminal perps are cheating at life and designing hells around us T.I. every day, internally and external to our body and mind. I'm not just crazy; I am systemically DRIVEN CRAZY by evil perps, street thugs, and worse with early access to technological advantages over us all in 3-

dimensions and 5 senses. Further, I must say somewhat sadly I believe all religions and all gods are fake, satanic and we good humans, Mormon, non-believer, Buddhist, Christians and all of the 7 billion on Earth of us are "fronts" of good people being exploited for inevitable forced memory wipes and reincarnation at the moon after death. That is our fate, I believe, unless we are wiser and know how to escape. After death reincarnation moon memory wipes are the worst evil of all in my humble opinion and please see John Lear and others on this hard to know research areas such as the moon, Wes Penre too. I did meet a fellow T.I. whose perps stopped using (V.2.K) on him after over 10 years. In perping, T.I. don't really know if their secret attackers are domestic or foreign. Perps sadly, expertly use dis-information, the sin of omission and partial truths, double meanings of words to drive us T.I. crazy and make us needlessly suffer and confuse us. Ruining our lives in only one component of what is done to us "woke" T.I. I once saw a perp faking human form that rearranged their face into a cyclops and confirmed the tactic also being used on a suspected fellow T.I. who thinks she is only "schizophrenic" along with her 10-year-old son. She's being human-trafficked and brutalized, as am I. To fake a person, another perp used this fake people technology and used a too tan to be the real thing, Instagram photo of an acquaintance to try to move in with me at a mental health outpatient facility. The perp faking a real seeming person sometimes called "skinwalkers" with the use of this tech and these systems. This is not only in my imagination or serotonin or dopamine related dysfunction in my brain. That said, perps can fake a whole human form in seemingly real 3-dimensions human life off a single photo, the

deception tech is that advanced and while it can drive us crazy it's not dismissible as only us T.I. being crazy. Brain Computer Interface computer code may be as simple as C++ computer coding language for the human body and mind. The French call orgasm, "the little death" and I can't confirm or deny but reportedly death in E.M.F. form feels really good before you wake back up in your real body, using the E.M.F. B.C.I. electroencephalography chair as described in Kevin Christian's Dark Journalism disclosures. As an aware truth-er T.I. still being lied to like we all are sadly, I want you to know your way to evacuate and how to after death if it turns out we are all cursed with eternal life, which I suspect is the case for all 7 billion of us. As for mind control and mind control addiction, in the old west we handled the opium problem by killing all the opium den addicts, and dealers. What is being done to 40 million of us T.I. by about 100 million perps of the 7 billion of us, is galactic crime and so very evil. I can't emphasize that enough, the evil of perping, and this is an addiction for perps, our suffering as T.I.

Evil technological uses and evil people and worse, reigns over us all in secret beyond 3-dimensions and 5 senses in the hidden electromagnetic spectrum. They, perps, are so many kinds of evil it takes over an hour and a half to describe, literally as mentioned. As stated before, I estimate there are 5 million E.M.F. Perp and flesh and blood criminal gang members within the U.S.A. alone, all working under the Department of Homeland Security
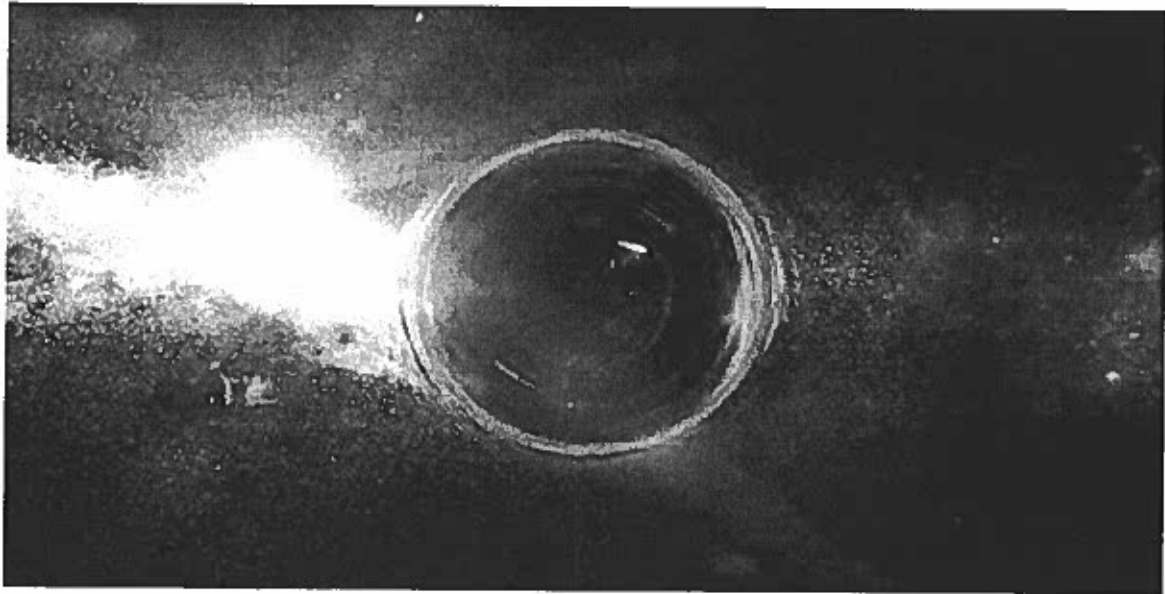
relentlessly, 24 hours a day. I also want to protect myself not with a shotgun which is no better than a paper weight to a hostile soldier, hologram E.M.F. perp who can't be killed with a shotgun and can break undetectably into your home as a faster piece of matter, microwave and/or ultraviolet form trans-sub-human. I want to be allowed to protect myself with the same electroencephalography cap equipment being used to terrorize and torture me today similar to the cap here on the normal internet www.openbci.com but the ones used against me are alleged on the darkweb. I can't confirm or deny perping equipment or electromagnetic being equipment available on a site on the darkweb called "cashcab" but plan to check it out as soon as I can. I am prevented from doing so, sadly. Phantom limb syndrome has been alleviated by patients in a virtual environment; not all of this V.R. tech is bad, it's how and who is using it. Perps, because of these black budget and black ops secret technology do not need to sleep anymore as previously stated. I will begin suing in a modern-day Salem, Oregon "cyberwitch" or E.M.F. perps, trial that is likely to fail. I will represent myself, pro se, in the lawsuit unless I can find a stellar pro-bono lawyer who knows how to defeat mind control in many regards, and knows the law; a person that does not exist and if they did exist would have to not care about becoming a T.I. also possibly for fighting back against the beast system. That is likely to not happen, so I am relying on myself. I was born into it, and would not wish my life on anyone, nearly literally. These secret terrorists and torturous perps falsely accuse of actually, literally in fact what they are guilty of themselves in framing attempts. Psychological projection in V.2.K., along with falsifying evidence and projecting in another way using Project Bluebeam are both used on myself and other good Americans. These dual tactics of deceit are used too often, and are huge war crimes. Perps really are catatonic in their human bodies, in their own feces. Truly, perps are attacking T.I. from their pee and poo at the same literally convincing themselves they are somehow "gods".
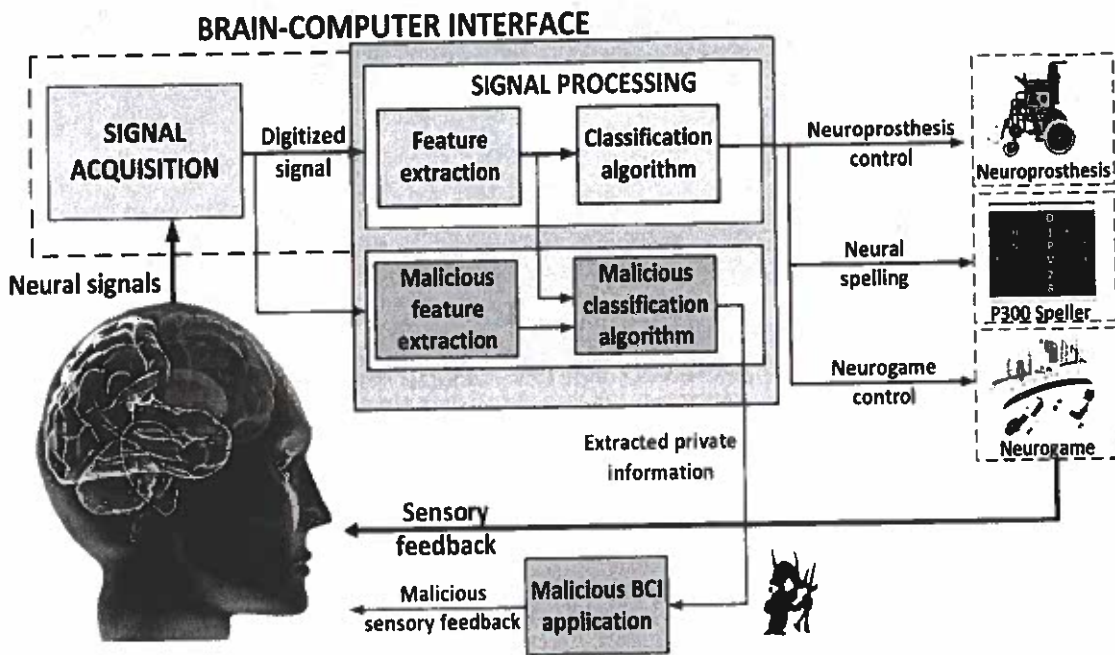
They, perps, are not gods. None of this is spiritual. These evil perps technologically astral projecting their consciousnesses to other locations using electroencephalography cap for crime, and to torture us T.I.'s over an entire T.I. lifetime. Perps are guilty of murders, which look like suicides in many cases. These sometimes flesh and blood, or robotized and/or hologram, electromagnetic form, deceptive, physics related weak force enabled, fake people torture other real human beings like myself, using Brain Computer Interface (B.C.I.). As stated with Black Ops tech and systems of the Intel communities (C.I.A., M.I.6., and K.G.B.), military and others that have corrupted staff and perps and other participants that should never have gotten access to such power, perps inflict prolonged terrorism, satanism, deadly sin and numerous other evils and crimes on myself, and I estimate there are 40 million other T.I. worldwide. Perps really are free from many and most punishments and get rewarded in enormous ways for their evil work despite what folks like Christians other T.I., s and others may think or be led to believe.

I am just one T.I. being overwhelmed by overt and secret evil, unable to be taken off the terrorist watch list to get my U.S. Constitutional rights back from civil, legal authorities and military tribunals if need be. Everything done to harm me from faked medical records to link me to the recent Saudi

citizen shooting up a Navy Base in Florida to community slander in Portland and the U.S.A, to remote rectal torture of me for 5 years and other implant abuse, identity theft, sexual humiliation, obstruction of justice, and nearly all of the first 13 amendments of the U.S. Constitution having been flagrantly violated against me as a T.I. Perps are falsifying my medical records, as hard as that is to believe it is the truth. Perps target us out of envy, hate, jealousy, greed, lies, their own mental illnesses and other evils. We T.I. too often die by designed suicide, which are secretly really murder. What is a long term plan you should know about come hell or high water? The Black Swiss Cheese Hole looking portal exits in space around the solar system came to me as front loaded, fail safe evacuation instructions I received in a reoccurring dream as a small child in the Middle East. Wes Penre and others can corroborate the information and are ultimately, merciful. I believe the long hard road of an evacuation after death is the way for me out of a V.R. solar system and universe. Possibly the whole cosmos is a V.R. Addressing a different but relevant topic, time travel I fear has already been successfully made possible by the possibly well intended, but time travel controlled by and for the truly evil. Time travel is also being faked too by perp in the here and now of 2020, and so forth who are not time traveling. Perps are constantly over-simplifying to deceive us, sometimes issues are and are not so, black and white. Electromagnetic Frequency, microwave radiation "broadcasting" that Kevin Christian Georgia T.I. describes is an obsessive evil, perps are preoccupied with dishonoring me, expecting some kind of calculable psychotic reaction based on perps who are psychopaths torturing me from their own ill perspectives of what they would not want while extracting my virtue and smarts through synthetic telepathy at speed of thought, as stated before. Please is fleeting, overall. An example of how I am an economic slave on par with what Edward Snowden warned about, I

recently made a recipe for northwest coffee food in 2019 (Ensure Plus and drip coffee) and was unable to capitalize on that being a white slave in the U.S.A., companies such as Starbucks soon after I came up with NW Coffee Food started making coffee with added protein to their own coffee drinks. I invented coffee food because I am poor and it's a safer way to not get

BRAIN-COMPUTER INTERFACE

poisoned by the way. I have been poisoned by perps many times. I can't even afford to sue as my idea gets capitalized on and that is the economic slavery that Edward Snowden warned us of in the surveillance economy America as I go on and tell your about mental and physical slavery of the worst kinds and more evils than that. There is a successful plot to steal the world's brain and out bodies and souls along with it.

Perps, say one thing and do the opposite and fit nearly part of all the definitions of evil. Perps are extreme criminals, cowards and what have been done to myself and the other T.I. has been compared to "Gladio 2" and what happened in Norway. The perps attacking me are no better than those attacking fellow Dark Journalist and proverbial and literal "Devil Jabber" Kevin Christian in Jonesborough, Georgia at Howard Circle passed out in their own pee, raping their brother's daughter and pillaging the world as likely also being psychopaths, deviants, sociopaths and narcissists who fake that they are god and fear no other humans. I can't emphasize that enough, PERPS ARE NOT GODS OR ANGELS OR GOOD. Perps very existence and huge crimes very much go against Buddhism, the 10 Commandments,

the U.S. Constitution and Bill of Rights and are not only crimes against humanity, war crimes also but crimes against creation itself, as I have previously asserted.

Perps are lazy thieves of whole people and whole lives, obsessed with broken tactics of divide and conquer and no real stratagem among them. Past causing chaos, I really don't think they can beat the recurring patterns of history. Ironically these gangs satanic disrespected me, a good soul, use satanic mocking, misdirection, N.L.P. repeaters and suggestions for trauma-based mind control, practice eugenics against me, faked secret police to man-handle local Police Departments, the pubic, T.I. and allegedly their own gangs along with the target audiences, as written about previously. I have seen the infamous black unmarked helicopters and domestic psyops with fake aliens in my family's home and a fake alien craft to go with it. Kevn Christian and I as aware targeted individuals know those are nothing more than human earth criminals, perp gang members, but 15 years ago I really did think I was visited by real aliens. I was not. I've had "animated" faces of the public and people around me for lip reading and the trick used on T.V. where it looks like people are talking about me and it's only my eyes that are being deceived. Asking the person if they really said "this is what we call being mind F$^#ed" for example, and their reply is that they did not say it is an example of reality testing against the gang member with my R.N.M. treating me worse than a wild animal or food in this beast system butchering of my life and worse at speed of thought, faster than sound, hypersonic.

Perps criminals fake they are stupid for intel gathering protocol, but then can't seem to wrap their heads around the idea if they can separate their body from their mind while alive with B.C.I., the likelihood the consciousness or the soul living on, separate from a body after we die is that much greater. In other words, they fake they are stupid, but are not however in some areas and examples when they wake back up at their real bodies after ruining my life, these evil criminals really are stupid, especially for even "playing god" which may be a cosmos-wide, no-no. The difference between incompetence and evil is too often confused, and lied about, to benefit the truly evil only faking stupidity and/or faking innocence for tactical and strategic advantage for evil. That has been the case for the most part of the perps attacking my mind remotely using N.L.P. to destroy my normally wholesome and even holy, consciousness. Perps develop high skill in faking stupid for evil purposes to mask, in part, their evil. Some of it is Neuro Linguistic Programming language for mind control and torture & they are not stupid much at all as hard for that is for me to admit. Again, it's an evil smart. Smart on it's

FOREWORD

For many experts on U.S. national security, the combination of emerging technology and innovative ideas seen in the Gulf War seem to herald a genuine revolution in military affairs. The victory of coalition forces demonstrated the technology and seemed to suggest that the revolution in military affairs can solve many of the strategic problems faced by the United States in the post-Cold War security environment.

In this study, the authors concede that the revolution in military affairs holds great promise for conventional, combined-arms warfare, but conclude that its potential value in conflict short of war, whether terrorism, insurgency, or violence associated with narcotrafficking, is not so clear-cut. Given this, national leaders and strategists should proceed cautiously and only after a full exploration of the ethical, political, and social implications of their decisions. To illustrate this, the authors develop a hypothetical future scenario--a "history" of U.S. efforts in conflict short of war during the first decade of the 21st century.

It is too early to offer concrete policy prescriptions for adapting many aspects of the revolution in military affairs to conflict short of war, but the authors do suggest an array of questions that should be debated. In order to decide whether to apply new technology and emerging concepts or *how* to employ them, the United States must first reach consensus on ultimate objectives and acceptable costs. The Strategic Studies Institute is pleased to offer this study as a first step in this process.

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SUMMARY

Many American strategic thinkers believe that we are in the beginning stages of a historical revolution in military affairs (RMA). This will not only change the nature of warfare, but also alter the global geopolitical balance.

To date, most attention has fallen on the opportunities provided by the RMA rather than its risks, costs, and unintended consequences. In the arena of conflict short of war, these risks, costs, and unintended consequences may outweigh the potential benefits.

The Strategic Context.

The Cold War notion of conflict short of war is obsolete. Politically and militarily, the Third World of the future will be full of danger. The future will most likely be dominated by peace enforcement in failed states, new forms of insurgency and terrorism, and "gray area phenomena." Many if not most Third World states will fragment into smaller units. Ungovernability and instability will be the norm with power dispersed among warlords, primal militias, and well-organized politico-criminal organizations. U.S. policy in the Third World is likely to be more selective and the U.S. homeland may no longer provide sanctuary. Renewed external support will restore the lagging proficiency of insurgents and terrorists.

The Application of Emerging Technology.

Emerging technology will have less impact on conflict short of war than on conventional, combined-arms warfare. It will, however, have some role. In noncombatant evacuation operations, new technology can assist with identification and notification of evacuees. Sensor technology, robotics, nonlethal weapons, and intelligence meshes will be used in combatting terrorism, countering narcotrafficking, and peace operations. These technologies, along with simulator training and unmanned aerial vehicles, will also be useful in insurgency and counterinsurgency.

Constraints and Countermeasures.

There are a number of constraints on applying the RMA to conflict short of war. These include the lack of a powerful institutional advocate for this process, a shortage of money for the development of technology specifically for conflict short of war, and the possibility that new technology may run counter to American values.

Enemies may also develop countermeasures to RMA innovations. Rather than attempt to match the technological prowess of U.S. forces, future enemies will probably seek asymmetrical countermeasures designed to strike at U.S. public support for engagement in conflict short of war, at the will of our friends and allies, or, in some cases, at deployed U.S. forces.

Making Revolution.

Rather than simply graft emerging technology to existing strategy, doctrine, organization, force structure, objectives, concepts, attitudes, and norms, the United States could pursue a full revolution in the way we approach conflict short of war. This is rife with hidden dangers and unintended consequences. A hypothetical future scenario illustrates some of these.

Conclusions and Recommendations.

In the near future, change will occur in the American approach to conflict short of war. To understand and control ongoing change, research, analysis, and debate is needed on a number of topics:

• A comprehensive general theory of military revolutions set within the context of broader notion of global politics and security;

• The strategy and policy foundation of military revolutions;

• The ethical dimension of RMA;

• The impact of the RMA on the structure of the U.S. national security organization;

• The impact of RMA on leader development within the military;

• The cultivation of appropriate expertise within the Army; and,

• Technology designed specifically for conflict short of war, especially psychological, biological, and defensive technology.

THE REVOLUTION IN MILITARY AFFAIRS AND
CONFLICT SHORT OF WAR

Introduction: Groping for the Future.
 In the late 1970s Soviet military analysts, led by Marshal N.V. Ogarkov, began to write of an emerging revolution in the nature of warfare.[1] By the early 1990s, this idea had spread to the United States, leading strategic thinkers inside and outside the government to conclude that ongoing innovation represents a true turning point in history.[2] If this is true, the strategic implications are far-reaching. Revolutionary changes in the character of warfare, according to Andrew F. Krepinevich, "have profound consequences for global and regional military balances."[3] But while it is clear that dramatic change is underway, its ultimate repercussions remain hidden.
 In its purest sense, revolution brings change that is *permanent, fundamental,* and *rapid.* The basic premise of the revolution in military affairs (RMA) is simple: throughout history, warfare usually developed in an evolutionary fashion, but occasionally ideas and inventions combined to propel dramatic and decisive change. This not only affected the application of military force, but often altered the geopolitical balance in favor of those who mastered the new form of warfare. The stakes of military revolution are thus immense. Full of promise, it seems to offer Americans an answer to many enduring strategic dilemmas, whether intolerance of casualties, impatience, or the shrinking military manpower base. In a time of shrinking defense budgets, emerging technology may allow the United States to maintain or even enhance its global military power.[4] The Gulf War was widely seen as a foretaste of RMA warfare, offering quick victory with limited casualties. As a result, most attention has been on the *opportunities* provided by RMA rather than its *risks, costs,* and *unintended side effects*.
 It is ironic that just as Marxism reached final bankruptcy as a framework for political and economic organization, one of its basic notions gained new life. Karl Marx, after all, postulated that revolutions can be *deliberate* rather than inadvertent; historical change can be created, engineered, and harnessed by those who understand it. Without direct attribution to Marx, this idea led many analysts to assume the current RMA can be the first deliberate one as senior military leaders and strategic thinkers consciously shape the future.
 Whether Marxist or not, revolutionaries must always ask a series of key questions. First: Do the proper preconditions exist for revolutionary change or can they be created? In contemporary military affairs, the answer to this is "yes." Emerging technology; economic, political, and social trends; and, most importantly, new ideas create the right environment for revolution. Then revolutionaries must ask: How can I begin, sustain, and control the revolution? In current military affairs, this question is still under debate.
 Finally, the most difficult and often most critical questions are: Do we truly want a revolution? and, Will the long-term benefits outweigh the costs and risks? Advocates of a revolution in military affairs have not begun to grapple with these issues.

1

The change wrought by some revolutions is deep; others do not reach such extremes. This also applies to RMAs. The United States now faces a crucial choice. We can choose to drive the current RMA further and faster than any of its predecessors. In combined-arms warfare, this may be necessary. But conflict short of war--whether terrorism, narcotrafficking, peace enforcement, or insurgency--is different. Even if the RMA does prove applicable to these problems, there are good reasons for *deliberately* limiting it. As the United States faces this dilemma, strategic considerations rather than our fascination with technology and enthusiasm for change must be paramount.

Cry "Havoc!": The Strategic Context.

RMAs are born, develop, and die in specific strategic contexts, each composed of an array of social, economic, political, and military factors. The strategic context of the current RMA is dominated by the transformation of the global system from the Cold War to post-Cold War period. This shapes conflict short of war and influences the utility of U.S. military force.

During the Cold War, the most strategically significant form of conflict short of war-- then called "low-intensity conflict"--was revolutionary insurgency in the Third World. Low-intensity conflict outside the Third World did not require U.S. military force--the British, Italians, Germans, or Spanish could deal with their own problems--but revolutionary insurgency targeting our Third World allies often did. Using the strategy of protracted guerrilla war perfected by Mao and Giap, insurgents, usually supported by the Soviet Union, China, or their proxies, sought to overthrow fragile, pro-Western regimes. Because revolutionary insurgency thwarted political reform and economic development, often spread to neighboring states, and, when successful, increased Soviet influence, we considered it a major threat. Admittedly no Third World insurgency directly endangered the United States, but in combination they did. The dominant strategic logic was what French counterinsurgent theorists called "death by a thousand small cuts."[5]

In response, Western strategists developed an elaborate counterinsurgency doctrine. Codified by Robert Thompson, Roger Trinquier, and others, this initially emerged from the French and British experience in Malaya, Algeria, and Indochina.[6] Eventually Americans assumed responsibility for the counterinsurgency paradigm; Vietnam replaced Malaya and Algeria as the seminal event.[7] The culmination of Cold War-era thinking was the 1990 release of Field Manual (FM) 100-20/Air Force Pamphlet (AFP) 3-20, *Military Operations in Low Intensity Conflict*.[8] By defining counterinsurgency as opposition to Marxist "people's war," this document viewed low-intensity conflict in general as a subset of the struggle between the superpowers.[9] Regime legitimacy was the central concept. The United States sought to augment this and, ultimately, ameliorate the underlying causes of conflict. The military dimension of counterinsurgency simply allowed economic and political reforms to take root. Counterinsurgents could not win through purely military means, according to this theory, but they could lose.

Full of well-developed, impressive thinking, FM 100-20 deals with forms of violence rapidly becoming obsolete. Today, the essential nature of conflict short of war is changing. Marxist "people's war" represents the past. The future will most likely be dominated by peace enforcement in failed states, new forms of "spiritual" insurgency designed to radically alter the ideological structure of regimes, and "commercial" insurgency from quasi-political "gray area phenomena" such as narcoterrorism.[10] Other important changes are also on the way. During the Cold War, conflict short of war primarily concerned nation-states. In the post-Cold War era, many if not most Third World states will fragment into smaller units. Ungovernability and instability will be the norm. Even those which formally remain intact will see political and military power dispersed among warlords, primal militias, and well-organized politico-criminal organizations.[11] Most of these will be characterized by ruthlessness, some also by dangerous sophistication as terrorists and narcotraffickers master modern technology. Rapid, multilayered global communications will allow insurgents, terrorists, and narcotraffickers

to learn and adapt quickly and even to form alliances and coalitions. While war or near-war may be no more common than in past decades, general, low-level violence will be pervasive.

In this environment, the United States will probably concentrate on containing rather than ameliorating conflict. Our future policy in the Third World is likely to be more selective with a trend toward disengagement. While the global conflict with the Soviet Union forced American engagement in Third World struggles where tangible national interests were minimal, the end of the Cold War gives us the option of limiting our role in certain types of conflicts to support of the United Nations or other multinational efforts, or rejecting involvement all together. While the great powers are currently cooperating on Third World conflict, they are likely to lose interest over the long-term. If this happens, U.S. objectives will increasingly be symbolic as we pursue humanitarian relief or attempt to cultivate a system of world order but are not willing to bear the costs of the final resolution of complex and long-standing conflicts.

Most ominously, the U.S. homeland may no longer provide sanctuary as it did from Cold War-era low intensity conflict. As in Great Britain, insurgents and terrorists angered by U.S. policy may bring the conflict to our country using global interdependence and the increased international flow of people. Moreover, as Third World dictators assimilate the lessons of the Gulf War, they will see conflict short of war as a useful but safer form of aggression. Renewed external support will restore the lagging proficiency of insurgents and terrorists including their technological capability. Politically and militarily, then, the Third World of the future will be full of danger.

Let Slip the Dogs of War: The Application of Emerging Technology.

The emerging RMA in mid- or high-intensity warfare is centered around the fusion of sophisticated remote sensing systems with extremely lethal, usually stand-off, precision-strike weapons systems and automation-assisted command, control, and communications (C^3). Trained with electronic simulations, virtual reality devices, and field exercises, this fusion is expected to allow smaller military forces to attain rapid, decisive results through synchronized, near-simultaneous operations throughout the breadth and depth of a theater of war.[12] The eventual result may be radically new forms of conventional warfare. With a few exceptions, however, the impact of the RMA on conflict short of war is far less clear.

Attacks or raids--which are doctrinal missions for the U.S. Army--are an exception. The military objective of attacks or raids in a conflict short of war is to damage or destroy high value targets of an adversary in order to seize and maintain the political or military initiative, and to demonstrate U.S. capability and resolve.[13] Although sometimes such operations are covert and executed by unconventional or special operations forces, in most cases a successful operation and its effects should be clearly visible to both the target and the international community. Emerging RMA technologies should improve the U.S. military's capability in these types of operations. Terrestrial, aerial, and space-based, autonomous, wide-ranging, high-speed collecting devices capable of on-board processing will identify precise targets and provide near-real-time information about the adversary's dispositions. Distributed interactive simulations and virtual reality devices will train the forces and be used to rehearse the strikes. And automation-assisted C^3 systems will synchronize and control lethal, stand-off, precision-guided weapons systems in near-simultaneous attacks.[14] Information technology could be used to both conceal the intent to strike and, later, provide evidence of a successful strike.[15] Attacks and raids during conflict short of war are, in effect, mid- to high-intensity operations writ small.[16] RMA therefore can have a significant effect. By contrast, the potential impact of emerging technology on more "traditional" operations in conflict short of war such as noncombatant evacuation operations (NEOs), counterterrorism, counternarcotrafficking, peace enforcement, and counterinsurgency is more ambiguous.

3

In the increasingly global economy, large numbers of Americans may find themselves in areas of instability and conflict. Voluntary and involuntary noncombatant evacuation operations will therefore be more frequent. The strategic objective of a NEO is the removal of U.S. (and occasionally allied) citizens from danger. The presence of Americans in areas of conflict reduces the flexibility of decision makers not only because U.S. citizens might be taken hostage or endangered, but also because their injury or death can rally public support in the United States for more militant action than policymakers might otherwise favor. But the open declaration of a NEO and its execution also restricts options since it signals the seriousness of a crisis by "clearing the decks" for further action. For decision makers this creates a tension between a desire to remove citizens from danger early and a fear of intensifying a crisis or precipitating undesirable adversary reaction.

While advances in robotics and information technologies may make it possible to perform many commercial activities with fewer employees in dangerous regions, those Americans who are overseas will be more isolated and dispersed. This complicates the main problems of NEOs: identification and notification of the individuals to be evacuated, identification of safe evacuation routes, and assessment of threats to the evacuation. Technology could diminish these problems. In the near future every American at risk could be equipped with an electronic individual position locator device (IPLD). The device, derived from the electronic bracelet used to control some criminal offenders or parolees, would continuously inform a central data bank of the individuals' locations. Eventually such a device could be permanently implanted under the skin, with automatic remote activation either upon departure from U.S. territory (while passing through the security screening system at the airport, for example) or by transmission of a NEO alert code to areas of conflict. Implantation would help preclude removal of the device (although, of course, some terrorists might be willing to remove a portion of the hostage's body if they knew where the device was implanted). The IPLD could also act as a form of IFFN (identification friend, foe, or neutral) if U.S. military personnel were equipped with appropriate challenge/response devices. Finally, such a device might eventually serve, like Dick Tracey's wrist radio, as a two-way communication channel permitting the NEO notification to be done covertly.

The second emerging technology with direct application in NEOs is the unmanned aerial vehicle (UAV). UAVs will be able to conduct rapid reconnaissance of possible evacuation routes and identify threats during the evacuation. Their small size will make them less conspicuous than either ground vehicles or manned air platforms. Large numbers of fast UAVs could cover multiple exit routes, thus complicating any attempt to interfere with the NEO. In combination with "wrist-radios," High Altitude Long Endurance (HALE) UAVs could provide NEO notification capability via scrambled TV/radio to Americans on the ground.[17] When a NEO required combat action, stand-off, precision-strike weapons systems could allow small military teams to accomplish missions which today require companies or even battalions.[18] Equipping these small units with adaptive camouflage could also reduce the visibility of NEOs.[19] The less visible an operation, the less provocative; the less visible military teams are, the harder to interfere with them.

Finally, developing military C^3I systems could help avoid dangerous, last minute evacuation of Americans all together. Currently, businessmen and diplomats facing crises tend to linger until the last possible moment, often ignoring official warnings. If the U.S. military could gain nondestructive access to (and perhaps even control of) the communications of an area from remote locations and made this available to Americans, businessmen and diplomats might voluntarily depart early in a crisis knowing they could carry on their activities even though not physically present. By encouraging voluntary departure prior to a crisis, reducing the need for a public disclosure of a NEO, and reducing the political visibility of evacuations, emerging technology increases options available to decision makers and reduces the degree to which NEOs act as barometers of U.S. resolve. When evacuees are

actually threatened, the ability to strike quickly, precisely, and from a distance will provide a margin of safety.

Providing safety is also the primary U.S. objective when combatting terrorism. Currently, the State Department deals with terrorism overseas and the Federal Bureau of Investigation has domestic jurisdiction. The military supports both. Efforts to combat terrorism fall into two categories: *defensive* measures to reduce the vulnerability of individuals and property (antiterrorism), and *offensive* actions to prevent, deter, and punish (counterterrorism).[20] Emerging technologies are a two-edged sword. Some-- like bio-technical weapons--can be tools of terrorism. Others--like precision, stand-off weapons or intrusive information technologies--may be used either for or against terrorism.

If technology allows a reduced American presence overseas, antiterrorism will be easier. Improved sensors and robotic guard systems may make installations, both military and commercial, more difficult to penetrate. In counterterrorism, according to Count de Marenches, former chief of French Intelligence, "Precision personal intelligence can be more critical than precision-guided munitions."[21] Advances in electronics and sensors and, even more importantly, the ability to fuse data through automation and improved organizations may provide that most critical commodity. New computer software, according to Alvin and Heidi Toffler, could "quickly discover and expose critical associations that would otherwise go undetected."[22] As demonstrated by Israel, UAVs can also play a significant role: "... a remotely piloted plane followed a car carrying fleeing terrorists back to their base, so that it could subsequently be demolished by air attack."[23] If the Army develops the aerial capability to broadcast and alter television signals, it could remove a key and essential weapon from the terrorist arsenal--media coverage.[24] Finally, some authors have speculated that advances in nonlethal weapons may make it possible to disable and capture terrorists or "glue" incoming car bombs to the street.

At least one analyst has suggested using "soft kill" weapons such as high energy radio frequency (HERF) guns and electromagnetic pulse transformer (EMP/T) bombs, to interdict narcotrafficking flights by damaging or destroying their avionics.[25] Like combatting terrorism, counternarcotrafficking operations are primarily a law enforcement function, with the military providing support.[26] Because narcotraffickers operate like terrorists, much counterterrorism technology can be used against them. In fact, narcotraffickers are even more likely than terrorists to rely on radios, cellular telephones, fax machines, and computers. This greatly increases their vulnerability to electronic intelligence gathering and disruption. For example, remote intrusive monitoring of the financial computer networks of offshore banks could identify the deposits associated with money laundering. If desired, such accounts could be electronically emptied.

Because interdicting narcotrafficking is similar to locating a military opponent's reconnaissance platforms, a military capable, in Martin Libicki's words, of collecting "more and more data about a battlefield, knitting a finer and finer mesh which can catch smaller and stealthier objects" could pinpoint intruders into U.S. territory.[27] Existing radar nets can identify aircraft attempting low altitude entry into the United States, so a favored technique of drug smugglers is to transfer the contraband from planes to speedboats offshore. Tracking and stopping high-speed small craft in coastal waters is difficult today. With projected advances in sensors and directed-energy or stand-off precision conventional munitions it could become routine. Drugs smuggled in commercial carriers might be interdicted by hosts of miniaturized, remote controlled, robotic detectors capable of rapid stem to stern searches of ships and airliners.[28] Interdiction of narcotics at the source, currently a resource-intensive activity involving search and destroy operations or large scale spraying of ecologically damaging herbicides, might be done in the future by miniature, self-mobile, bio-mechanical "bugs" delivered by aerial dispenser to seek out and kill or modify narcotic producing plants.[29] Alternatively, information warfare systems might influence the behavior of

populations by convincing citizens to turn in traffickers or not buy drugs.

Behavior modification is a key component of peace enforcement. The primary objective of these operations is to prevent violence and facilitate diplomatic resolution of a conflict.[30] "Soft kill" systems can play a key role. Examples include not only information warfare but also biotechnical antimaterial agents which "could disable propulsion systems (attacking fuel and lubricants or clogging airways and critical passages); change the characteristics of soil or vegetation (to deny terrain to vehicles and troops); or degrade warfighting material (particularly those with organic components)."[31] Advances in electronics and robotics could also prove useful in peace operations, allowing commanders to separate forces with a "no man's land" populated by remote sensing devices or robotic patrols and enforced with stand-off precision strike weapons, thus reducing peacekeeper casualties and improving the chances that the peacekeeping force will remain long enough for a political resolution of the conflict.

The final area of consideration for application of emerging technologies to conflict short of war are insurgency and counterinsurgency. The military objectives of insurgency and counterinsurgency are diametrically opposed. In insurgency the United States assists an armed political organization attempting to seize power or extract political concessions from a regime opposed to U.S. interests. Counterinsurgency seeks to contain or defeat an insurgency attempting the overthrow of a friendly regime.[32] How then, might the RMA affect these operations? According to FM 100-20 the U.S. armed forces, when directed to do so, can assist insurgent efforts to:

- Recruit, organize, train, and equip forces;
- Develop institutions and infrastructure;
- Gather intelligence; and
- Perform psychological operations, surreptitious insertions, linkups, evasion, escape, subversion, sabotage, and resupply.[33]

Emerging technology can augment U.S. capabilities in a number of these areas. Simulator training devices can help force development and partially compensate for the difficulties insurgents face in performing actual field training. UAVs can be used for psychological operations aimed at mobilizing support and enhancing the legitimacy of the insurgents. Stealth vehicles can be used for insertions, biotechnological antimaterial agents for sabotage, and the U.S.'s extensive sensor and collector network can provide intelligence support.

Counterinsurgency is similar. Success hinges on obtaining accurate intelligence about the insurgents, and developing or maintaining government legitimacy. Greatly improved intelligence gathering and fusion is a primary component of the RMA, and proposed information warfare capabilities might be ideally suited for helping develop desired emotions, attitudes, or behavior.[34] Stand-off weapons could interdict outside support to the insurgents without requiring a U.S. presence. This could help a beleaguered regime maintain legitimacy. Improved training of security forces using simulators would improve their effectiveness, thus increasing the public's trust in the regime's ability to provide security.

Potholes in the Information Superhighway: Constraints and Countermeasures.

Emerging technology may improve the application of force in conflict short of war, but there is probably no imminent RMA in this arena. The changes in conflict short of war will be considerably less dramatic than in those projected for mid- to high-intensity combat, particularly when possible constraints or countermeasures are considered.

These constraints begin at the highest level as the basic nature of our national security organization generates obstacles to innovation. As Stephen Peter Rosen points out, large bureaucracies are not only difficult to change, they are explicitly designed not to change--"the absence of innovation is the rule, the natural state."[35] Ironically, the successful end of the Cold War,

even though it dramatically increased the *need* for innovation, complicates the process. In all human endeavors, success tends to stifle innovation. The natural attitude is "if it ain't broke, don't fix it." The fact that the United States has not faced a recent military or national security disaster has hindered the development and application of new technology to conflict short of war. To many Americans, the absence of disaster shows that our national security strategy "ain't broke." Moreover, conflict short of war lacks a powerful institutional advocate able to transcend this attitude. Both civilian and military leaders in the Department of Defense fear that effort, time, and, most importantly, money spent on conflict short of war will be subtracted from that available for conventional combined-arms warfare. And it is not clear that the American public and the Congress consider improving our capabilities in conflict short of war important.

In this era of shrinking defense budgets, little money is available for technology designed specifically for conflict short of war. Fortunately, much of the technology developed for conventional mid- and high-intensity conflict can be extrapolated to conflict short of war, but insurgency, terrorism, and narcotrafficking also demand some unique capabilities. Like a business' investment in new plant, military technology increases effectiveness and efficiency in the long-term, but has major short-term costs. If we choose to engage in conflict short of war, two things could inspire efforts to develop and apply cutting-edge technology. One is the emergence of an active and powerful coterie of visionaries within the national security community, including both senior military and civilian leaders. The other is defeat or disaster. Yet even if the United States did make a concerted effort to apply emerging technology to conflict short of war, our opponents would quickly develop countermeasures, thus posing new problems and forcing further innovation by U.S. forces. Because U.S. engagement in conflict short of war will continue to be have weak domestic support, opponents will not have to match us innovation for innovation, but only increase the cost of American engagement beyond the low limits of public and congressional tolerance. How, then, might future opponents attempt to counter high-tech U.S. forces?

First, they will strike at domestic support for U.S. engagement. One way to do this is to kill Americans or damage U.S. property. Off-duty and rear-area U.S. forces in country will--as always--be targets. But in the increasingly mobile and interdependent world, the United States itself may also be vulnerable. At times, immigrant or resident alien communities within the United States may provide a base of support. New alliances among groups unhappy with our policy will coalesce, share information and, occasionally, conduct cooperative operations. Electronic terrorism--the sabotage of communications and computer systems in retaliation for official policy--will also be a tool of our enemies. Cyberspace will supplement international airports as the point-of-entry for terrorists. As a National Security Decision Directive signed by President Bush noted, "Telecommunications and information processing systems are highly susceptible to interception, unauthorized access, and related forms of technical exploitation...The technology to exploit these electronic systems is widespread and is used extensively by foreign nations and can be employed, as well, by terrorist groups..."[36] Opponents will also undercut domestic support for U.S. engagement through traditional political mobilization using immigrant and resident alien communities as well as sympathetic indigenous political groups--time-tested tactics honed during Vietnam and the 1980s. Advertising and public relations firms will be hired to construct sophisticated "consciousness-raising" campaigns. Often these will attack American public opinion indirectly by creating international opposition to our policy.

Opponents will also counter American military prowess by targeting our friends and allies. Reliance on allies has long been an American vulnerability in conflict short of war. In Vietnam, for example, even our hard-won understanding of revolutionary "people's war" could not bring victory to the incompetent and repressive Saigon elite. For American doctrine and strategy to work, we must have a local ally with some base of legitimacy.

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Given this, future opponents may not even attempt to confront high-tech American forces, but instead steal a flank march by undercutting our allies. In conventional, combined-arms warfare, backward or weak contingents of coalitions can be assigned peripheral duties--figuratively holding the horses--and thus not erode the overall military effectiveness of the alliance. With the exception of operations in failed states or certain types of raids and attacks, a host nation must be the centerpiece of efforts to confront insurgency, terrorism, or narcotrafficking. The United States can be no more effective than its allies, a coalition no stronger than its weakest element. Terrorists, insurgents, and narcotraffickers will quickly recognize this.

In some cases, though, our opponents will attempt to directly counter deployed American forces. Since new technology will improve the ability of U.S. forces to locate and track enemies and to collect, analyze, and disseminate intelligence, the most useful countermeasures will be tactical, operational, and strategic camouflage and deception. Some opponents, especially those with an external sponsor, may deploy limited but high-tech methods of camouflage and deception. External sponsors may also provide just enough technology to their clients to foil our forces as Stingers did for the Afghan *mujahedeen*. Some narcotraffickers, insurgents, or terrorists will take a purely low-tech approach including things as simple as abandoning electronic communications in favor of written or voice messages, and relying on time-tested cellular organization to foil intelligence efforts.[37] Organizational decentralization may not totally destroy the effectiveness of RMA technology, but certainly erodes it. Saddam Hussein's Iraq or the other Third World caricatures of the Soviet Union are perfect opponents for a RMA-type military. Driven by the well-earned paranoia of tyrants, they have highly centralized military forces. This prevents coups d'etat, but also limits the chance of military victory against determined advanced states. Future insurgents, terrorists, and narcotraffickers will not be so stupid.

The use of new technology may also run counter to basic American values. Information age--and in particular information warfare--technologies cause concerns about privacy.[38] For example, the individual position locator raises several thorny issues: Would Americans overseas be forced to wear (or worse have implanted) such a device or would its use be voluntary? If forced, would it apply equally to those employed overseas and tourists? Will Americans accept the fact that the government might, by access to the NEO locator data base, know every move they make? If a locator device could be remotely activated, how could Americans be sure that activation was only effective outside the United States? How would they know that "wrist radios" were not used to monitor personal conversations? Similarly, military use of television against foreign adversaries raises the specter of domestic applications. Even if domestic use was never contemplated, its possibility might cause greater public skepticism regarding television appearances, reducing the impact of one of the American politician's greatest communication tools. Deception, while frequently of great military or political value, is thought of as somehow "un-American."

American values also make the use of directed energy weapons against suspected narcotrafficking aircraft technologically feasible but morally difficult, perhaps unacceptable. The advantage of directed energy weapons over conventional ones is deniability. Against whom is such deniability aimed? Certainly not the narcotraffickers, who will quickly recognize that interception by the Drug Enforcement Agency (DEA) or military planes leads to loss of their aircraft.[39] Instead, deniability must be aimed at the American people, who do not sanction the imprisonment, much less execution, of individuals without a trial (and execution is how they will perceive it--the argument "we only disabled the aircraft, it was the crash which killed the pilot" will carry little weight). Deniability will not last long, since narcotraffickers can choose any number of ways to make such interceptions public such as landing and then challenging the intercept technique in court, or arranging to relay communications with their aircraft to a ground station which could broadcast the "nonlethal" downing (ideally of a plane carrying no

drugs). The American public may perceive the DEA or military involved in such actions to be as bad or worse than the narcotraffickers.

Certain biotechnical weapons--considered by some to violate the biological warfare convention to which the United States is a signatory--also may transgress American values regarding appropriate means.[40] Most Americans would not support the use of a weapon designed to target only a specific racial or ethnic group in anything less than a war for survival of the nation.[41] Could the government and military of this multi-ethnic republic face charges that it was developing or using a weapon targeting Africans, Jews, Koreans, Hispanics, etc.? Would defense against such a charge occupy the attention of policymakers to the detriment of other essential business? And even accidental injuries or deaths caused by "nonlethal" antimaterial substances could be politically damaging.

American values and attitudes thus form significant constraints on full use of emerging technology, at least in anything short of a perceived war for national survival. Overcoming these constraints to make a RMA in conflict short of war would require fundamental changes in the United States--an ethical and political revolution may be necessary to make a military revolution.

The Silicon Icarus: Making Revolution.

Even with all the constraints and countermeasures, there is some value in applying emerging technology using existing strategy, doctrine, organization, force structure, objectives, concepts, attitudes, and norms. But there is another alternative: we could deliberately engineer a comprehensive revolution, seeking utter transformation rather than simply an expeditious use of new technology. However alluring, such a program is rife with hidden dangers and unintended consequences. Unlike the architects of the Manhattan Project, we are not forced to pursue revolution without considering the implications. In conflict short of war, RMA is a Pandora's box desperately in need of careful scrutiny before opening.

But how to do so? Because it transcends the comfortable familiarity of both the past and present, revolution is never easy. It is, above all, a challenge to the imagination. Even the greatest revolutionaries have only hazy images of the future, their lives driven more by shadowy vision than concrete plans. But for decision makers contemplating revolution, visualizing long-term implications--however difficult--is the only way to gauge whether or not they truly want the kind of fundamental and irrevocable change revolution brings. To decide how far we want to push RMA in the arena of conflict short of war, Americans must speculate on where it might ultimately lead. One way to do this is by constructing hypothetical future scenarios. There are any number of feasible scenarios. The probability of any one is less important than the interconnections it uncovers. What follows, then, is such a hypothetical future scenario--a "history" of the application of RMA to conflict short of war written in the year 2010. It is not a prediction and certainly not a preference, but is a possibility.

The first question is: What led American leaders and national security professionals to apply the revolution in military affairs to conflict short of war? Most often, a revolution in military affairs occurs in response to defeat or a perception of rising threat. Napoleon led an undrilled army stripped of most veteran officers against a host of enemies; the architects of blitzkrieg all had first-hand experience with bitter military defeat. Likewise, the RMA of the 2000s was sparked by a series of fiascos in the mid-1990s. First was the emergence of what became known as "third wave terrorism." Recognizing the strategic bankruptcy of old-fashioned hijacking, kidnapping, assassination, and bombing, terrorists rapidly adopted state-of-the art technology to their sinister ends. Within Third World countries, they developed the means to identify and kill American businessmen, diplomats and military advisors at will, and to disrupt international air traffic and

electronic communications in and out of their countries. Even more damaging was their ability to "carry the war to its source" in the United States. Biotechnology and information warfare, especially sabotage of communications and computer networks using mobile high power microwave sources, replaced AK-47s and SEMTEX as the preferred tools of terrorism. The new post-Mafia generation of silicon criminals provided models and even mentors for third wave terrorists.

About the same time, the U.S. military became embroiled in several horrific ethnic struggles. Our involvement usually began as part of a multinational peacekeeping or peace enforcement operation, but rapidly turned violent when American forces were killed or held hostage. The usual response to the first few attacks on Americans was to send reinforcements, thus placing U.S. prestige on the line. Since our strategy was contingent on global leadership, we were aware of the political damage which would result from being forcibly expelled from a Third World country, and thus doggedly "stayed the course" until domestic pressure forced withdrawal. On the ground, enemies would not directly fight our magnificent military forces, but relied instead on mines, assassination, and terror bombings.

The costs of these imbroglios were immense. A bitter dispute broke out in the United States between supporters of multinational peace operations and isolationists. And domestic political acrimony was not the only long-term cost of these operations: many of our troops assigned to operations in tropical areas brought back new resilient diseases which then gained a foothold in the United States. Debate was fierce over the new law requiring long-term quarantine of troops returning from Third World operations.

American efforts at counterinsurgency during the mid-1990s were no more successful. Whether facing commercial insurgents such as narcotraffickers or spiritual insurgents attempting to forge new systems of identity and personal meaning in their nations, we found that our allies were penetrated with enemy agents, corrupt, and unable to ameliorate the severe political, economic, and social problems that had given rise to insurgency. When a number of these allied governments collapsed, we were privately relieved but publicly aware of the precipitous decline in our prestige. At times, the United States tottered dangerously close to being the "poor, pitiful giant" Richard Nixon warned against.

In areas where the United States was not militarily involved, the major trends of the 1990s were the disintegration of nations, ungovernability, ecological decay, and persistent conflict. Much of this had a direct impact on the United States whether by generating waves of desperate immigrants, inspiring terrorists frustrated by our failure to solve their nations' problems, creating health and ecological problems which infiltrated the continental United States, or increasing divisiveness in the robustly multicultural American polity.

This series of fiascos led a small number of American political leaders, senior military officers, and national security experts to conclude that a revolution was needed in the way we approached conflict short of war. They held the Vietnam-inspired doctrine of the 1980s and 1990s directly responsible for these disasters. Only radical innovation, they concluded, could renew U.S. strategy and avoid a slide into the global irrelevance. Nearly everyone agreed the old strategic framework which coalesced in the 1960s was bankrupt. This thinking, derived from the Marshall Plan, sought to use American aid and advice to ameliorate the "root causes" of conflict in the Third World and build effective, legitimate governments. By the 1990s this was impossible or, at least, not worth the costs. Few, if any, Third World governments had the inherent capability of becoming stable and legitimate even with outside assistance.

The revolutionaries'first task was to recruit proselytes

throughout the government and national security community. Initially the revolutionaries, who called their new strategic concept "Dynamic Defense," were opposed by isolationists who felt that new technology should be used simply to build an impenetrable electronic and physical barrier around the United States. Eventually the revolutionaries convinced the president-elect following the campaign of 2000 that Dynamic Defense was both feasible and effective--a task made easier by his background as a pioneering entrepreneur in the computer-generated and controlled "perception-molding" systems developed by the advertising industry. The President was thus amenable to the use of the sort of psychotechnology which formed the core of the RMA in conflict short of war.

The first step in implementing Dynamic Defense was reshaping the national security organization and its underlying attitudes and values. Technology provided opportunity; only intellectual change could consolidate it. With the full and active support of the President, the revolutionaries reorganized the American national security system to make maximum use of emerging technology and new ideas. This loosely reflected the earlier revolution in the world of business, and sought to make the U.S. national security organization more flexible and quicker to react to shifts in the global security environment. The old Cold War structures--the Department of Defense, Department of State, Central Intelligence Agency, National Security Council, and others--were replaced by two organizations. One controlled all U.S. actions designed to **prevent** conflict, including economic assistance programs and peacetime diplomacy. The second was responsible for **containing** conflict by orchestrating sanctions, quarantines, embargoes, the building of multinational coalitions, and conflict short of war. This integrated the military, civilian law enforcement, the diplomatic corps, and organizations responsible for gathering and analyzing intelligence. Since so many of the conflicts faced by the United States were "gray area" threats falling somewhere in between traditional military problems and traditional law enforcement problems, the organizational division between the two was abolished. Moreover, many aspects of national security were civilianized or sub-contracted to save costs.[42]

One of the most difficult dimensions of the reorganization was altering the dominant ethos of the armed forces. As technology changed the way force was applied, things such as personal courage, face-to-face leadership, and the "warfighter" mentality became irrelevant. Technological proficiency became the prime criterion for advancement within the military while the officer corps came to consider research universities such as Cal Tech and MIT its breeding ground rather than increasingly archaic institutions like West Point and Annapolis. For the military, the most common career track alternated assignments in national security with ones in business and science. Since physical endurance was not particularly important, military careers no longer ended after 20 or 30 years. In fact, soldiers and officers were given few responsibilities until the twentieth year of their careers. As proposed by Carl Builder, the Army was organized into highly specialized units permanently associated with a territorial franchise.[43] Careers were within one of these units, thus allowing all soldiers and officers to develop the sort of language and cultural abilities previously limited to Special Forces and Foreign Area Officers.

One of the turning points of the revolution came when its leaders convinced the President and key members of Congress that traditional American ethics were a major hinderance to the RMA. This was crucial: the revolutionaries and their allies then crafted the appropriate attitudinal vessel for the RMA. Through persistent efforts and very sophisticated domestic "consciousness-raising," old-fashioned notions of personal privacy and national sovereignty changed. This was relatively

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easy since frustration with domestic crime had already begun to alter attitudes and values. In fact, the RMA in conflict short of war was, in many ways, a spin-off of the domestic "war on drugs and crime" of the late 1990s when the military, as predicted by William Mendel in 1994, became heavily involved in support to domestic law enforcement.[44] The changes in American values that accompanied that struggle were easily translated to the national security arena. Once the norms concerning personal privacy changed, law soon followed.

Old-fashioned ideas about information control and scientific inquiry also changed. Preventing enemies (or potential enemies) from responding to our technological advantages became a prime objective of U.S. national security strategy. The government closely controlled and monitored foreign students attending American universities and exchanges of information within the global scientific and business communities. When necessary, the government protected valuable information through outright deception. And the national security community cooperated closely with business on counterespionage, providing training, advice, and equipment.

With values changed, technology then opened the door to profound innovation. Vast improvements in surveillance systems and information processing made it possible to monitor a large number of enemies (and potential enemies). In the pre-RMA days, psychological operations and psychological warfare were primitive. As they advanced into the electronic and bioelectronic era, it was necessary to rethink our ethical prohibitions on manipulating the minds of enemies (and potential enemies) both international and domestic. Cutting-edge pharmaceutical technology also provided tools for national security strategists.

Sometimes the revolutionaries found it necessary to stoke the development of technology designed specifically for conflict short of war. Whenever possible, profitability was used to encourage private and quasi-private enterprises to develop appropriate technology. For example, much of the lucrative technology of surveillance, intelligence collection, and attitude manipulation used to solve the domestic crime problem was easily adapted to conflict short of war. The same held for new weapons, especially nonlethal biological ones and advanced psychotechnology. Only when there was absolutely no expectation of profit did the government directly sponsor research of cutting-edge technology, often with funds freed by disbanding what were seen as increasingly irrelevant conventional military forces.

All of this reorganization and technological development was simply preface for the full flowering of the revolution in military affairs. American leaders popularized a new, more inclusive concept of national security. No distinction--legal or otherwise--was drawn between internal and external threats. In the interdependent 21st century world, such a differentiation was dangerously nostalgic. The new concept of security also included ecological, public health, electronic, psychological, and economic threats. Illegal immigrants carrying resistant strains of disease were considered every bit as dangerous as enemy soldiers. Actions which damaged the global ecology, even if they occurred outside the nominal borders of the United States, were seen as security threats which should be stopped by force if necessary. Computer hackers were enemies. Finally, external manipulation of the American public psychology was defined as a security threat.

The actual strategy built on the RMA was divided into three tracks. The first sought to perpetuate the revolution. Its internal dimension institutionalized the organizational and attitudinal changes that made the revolution possible, and pursued future breakthroughs in close conjunction with business, the scientific community, and local law enforcement agencies--the core troika of 21st century security. The external dimension actively sought to delay or prevent counterresponses

by controlling information and through well-orchestrated deception.

The second track consisted of offensive action. Our preference was preemption. In a dangerous world, it was preferable to kill terrorists before they could damage the ecology or strike at the United States. While Americans had long supported this in theory, the RMA allowed us to actually do it with minimal risk just as the Industrial Revolution allowed 19th century strategists to build the massive militaries they had long desired. If regional conflicts--whether ethnic, racial, religious, or economic--did not damage the global ecology or appear likely to bring disease or violence to the United States, they were ignored. When conflicts seemed likely to generate direct challenges, the United States did not attempt ultimate resolution, but only to preempt and disrupt whatever aspect of the conflict seemed likely to endanger us. In the quest for strategic economy, preemption was the byword. Since the RMA made preemption quick, covert, usually successful, and politically acceptable, the United States gradually abandoned collective efforts. Nearly all allies, with their old-fashioned, pre-RMA militaries, proved more an encumbrance than a help. When preemption failed, the United States sought either passive containment which included isolation and quarantines, or active containment where strikes (electronic, psychological, or physical) were used to limit the spread of the deleterious effects of a conflict. For opponents with the ability to harm the United States, the military preemptively destroyed their capabilities.

The third track of the strategy was defensive, and included missile defense, cyberspace defense, and rigid immigration control.

By 2010, the RMA accomplished its desired objectives. Most of the time, we prevented Third World conflict from directly touching our shores. Probably the finest hour of the new warriors was the Cuba preemption of 2005--Operation Ceberus. This was so smooth, so effective that it warrants explanation. Following the overthrow of Fidel Castro in 1995 by a popular revolt, an elected government of national unity quickly proved unable to engineer massive economic and ecological reconstruction of the country or build a stable democracy. Frequent seizures of emergency powers and fraudulent elections were the rule. Within a few years, nostalgia for the stability of the old regime gave rise to an armed insurgency; most of the front-line rebels were former members of Castro's security forces and military. The United States refused to directly support the corrupt and inept regime, but recognized that the conflict required our attention.

The operation officially began when the President transferred the Cuban portfolio from the Conflict Preemption Agency to the Conflict Containment Agency. An existing contingency plan with implementing software provided the framework for quick action. Immediately, all electronic communication in and out of Cuba was surreptitiously transferred to the national security filter at Fort Meade. This allowed full monitoring, control, and, when necessary, manipulation of private, commercial, and government signals. Potential or possible supporters of the insurgency around the world were identified using the Comprehensive Interagency Integrated Database. These were categorized as "potential" or "active," with sophisticated computerized personality simulations used to develop, tailor, and focus psychological campaigns for each.

Individuals and organizations with active predilections to support the insurgency were targets of an elaborate global ruse using computer communications networks and appeals by a computer-generated insurgent leader. Real insurgent leaders who were identified were left in place so that sophisticated computer analysis of their contacts could be developed. Internecine conflict within the insurgent elite was engineered using psychotechnology. Psychological operations included traditional propaganda as well as more aggressive steps such as drug-

assisted subliminal conditioning. At the same time, Cubans within the United States and around the world were assigned maximum surveillance status to monitor their physical presence and communications webs. This thwarted several attempts to establish terrorist cells in the United States.

Within Cuba itself, fighting was widespread. Several acts of industrial and ecological terrorism led to the outbreak of disease. U.S. forces under the command of the Conflict Containment Agency helped control these while limiting the chance of their own infection by "stand-off" and robotic medical and humanitarian relief. Naturally all food supplies contained a super long-lasting sedative. This calmed local passions and led to an immediate decline in anti-regime activity. Where there were no direct U.S. relief efforts, sedatives were dispersed using cruise missiles. In areas thought to have high areas of insurgent activity, the dosage was increased.

Since all Americans in Cuba had been bioelectrically tagged and monitored during the initial stages of the conflict, the NEO went smoothly, including the mandatory health screening of all those returning to the United States. Coast Guard aircraft and hovercraft stanched illegal refugees. The attitude-shaping campaigns aimed at the American public, the global public, and the Cuban people went quite well, including those parts using computer-generated broadcasts by insurgent leaders--"morphing"-- in which they were shown as disoriented and psychotic. Subliminal messages surreptitiously integrated with Cuban television transmissions were also helpful.[45] In fact, all of this was so successful that there were only a few instances of covert, stand-off military strikes when insurgent targets arose and government forces seemed on the verge of defeat. U.S. strike forces also attacked neutral targets to support the psychological campaign as computer-generated insurgent leaders claimed credit for the raids. At times, even the raids themselves were computer-invented "recreations." (These were a specialty of the Army's elite Sun Tzu Battalion.)

Eventually it all worked: the insurgents were discredited and their war faded to simmering conflict unlikely to directly threaten the United States. Even the relatively unimportant criticism from domestic political groups was stilled when the President temporarily raised the quota of Cuban orphans eligible for adoption in the United States.

Unfortunately, there are growing signs in 2010 that the great advantages brought by the RMA might be eroding. With a decade to adapt, many opponents of the United States-both state and non-state actors-are themselves bending technology to their ends. While none can match the prowess of American forces across the board, indications are that by concentrating on one potential weakness of U.S. forces, enemies might be able to increase the human costs of intervention and, if not defeat the United States, at least deny us success. The RMA has amplified our distaste for death, a liability our enemies initially disdained and are now learning to manipulate in simple, low-tech ways.

In 2010, a decade of constant success in counterterrorism was marred by several dramatic failures. The post-attack environmental clean-up and reconstruction of St. Louis will take decades. Many of the difficult-to-detect drugs and psychotechnology developed for use in conflict short of war have appeared on the domestic black market and, increasingly, in American schools and workplaces. Perhaps most important, Americans are beginning to question the economic, human, and ethical costs of our new strategy. A political movement called the "New Humanitarianism" is growing, especially among Americans of non-European descent, and seems likely to play a major role in the presidential election of 2012. There are even rumblings of discontent within the national security community as the full meaning of the revolution becomes clear. Since the distinction between the military and non-military components of our national security community has eroded,

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many of those notionally in the military service have to come to feel
unbound by traditional notions of civil-military relations. This group
has founded a new political party-The Eagle Movement-which is beginning
to exert great pressure on the traditional political parties for
inclusion in national policymaking. The traditional parties are, to put
it lightly, intimidated by the Eagle Movement, and seem likely to accept
its demands.

In the end, only historians and philosophers of the future can
ultimately assess the consequences of applying the RMA to conflict short
of war.

Defining the Agenda: Conclusions and Recommendations.

The impact of purely military innovation, whether revolutionary or
evolutionary, is nearly always less in conflict short of war than in
warfare. The military dimension of conflict short of war is smaller, a
less decisive proportion of the total struggle. Political, diplomatic,
cultural, psychological, and economic factors matter in all conflicts,
but are preeminent in conflict short of war. Military superiority-
however measured-nearly always brings battlefield victory, but as
Vietnam, Algeria, and a hundred other steamy struggles showed, it is not
always strategically decisive in conflict short of war.

Still, there is some value in applying emerging technology and
innovative concepts to conflict short of war. If the United States wants
marginal improvements of effectiveness and efficiency, emerging
technology and new concepts offer it. The bigger question is whether to
seek true revolution rather than simply marginal improvements. To do so
will demand fundamental changes in attitudes and values as well as
organization, force structure, doctrine, and techniques. After serious
debate, the people and leaders of the United States may decide the costs
and risks of applying RMA to conflict short of war are not worth the
expected benefits.

Even without such debate, undesirable change may come through
accretion. By applying new technology here and new concepts there, by
making apparently limited and benign modifications in the way we
approach conflict short of war, by serendipity, we may eventually
stumble into change as ultimately profound as deliberate revolution.
Equally, revolutionary change in our approach to conflict short of war
may come about *indirectly* as we grapple with domestic problems such as
crime and drugs. If our traditional notions of privacy and public
security are altered to fight these battles, it is an easy step to
change our attitudes toward intervention in the affairs and psyches of
foreign foes. Again, the focus on short-term considerations may lead to
an undesirable future.

Whether we opt for revolution or evolution, change will occur. Our
current approach to conflict short of war is a child of the Cold War.
New threats demand new ideas; old assumptions no longer hold. To
understand and control ongoing change, research, analysis, and debate is
needed. Adaptation of military force structure, doctrine, and procedures
must follow rather than precede this. The agenda for research, analysis,
and debate, at least, is fairly clear.

For starters, we must develop a *comprehensive general theory of*
military revolutions set within the context of broader notion of global
politics and security. Currently, there is no accepted definition of
RMAs or even agreement on which historical transformations constituted
revolutions. It is not clear whether military revolutions are
independent variables created by military leaders, or dependent
variables that occur as spin-offs of wider social, political, and
economic changes. We do not know conclusively whether military
revolutions can be deliberately created, or whether rapid change is only
seen as revolutionary after the fact. If the latter is true, then
perhaps military revolutions are gist only for historians and not
strategists. The concept of the "life-span" of a revolution-the period

during which the enemy deliberately or inadvertently allows asymmetry to persist-also demands attention. What determines the "life-span"? Does military innovation increase the chances of conflict or diminish it? Finally, what is the relationship between the nature of future armed conflict and RMAs? Most of what are considered RMAs occurred in the Westphalian state system. Can they also occur in some different type of political system not based on nation-states and traditional inter-state war?

The *strategy and policy foundation of military revolutions* also warrants further study. Again, the direction of influence is central: Can military revolutions cause strategy to change, do strategic changes somehow generate military revolutions, or must they always occur simultaneously? Can an incomplete or partial military revolution occur in the absence of fundamental strategic change? Once these questions are answered, the architects of RMA must, if they are to gauge the potential for a military revolution, discern the future of U.S. strategy and policy in the Third World. American decision makers and strategists must then decide whether institutionalizing military revolution should be an integral part of our national security strategy in the absence of an equally innovative opponent like the Soviet Union.

Perhaps more importantly, analysis of *the ethical dimension of RMA* is needed. Military strategists often overlook the fact that the employment of force occurs within and is structured by an elaborate normative framework. This has a historical *foundation* based on just war theory, the Judeo- Christian ethical tradition, and international law as well as a *superstructure* constantly modified by specific military and political developments. In the 20th century total war, strategic bombing, nuclear weapons, limited war, and revolutionary people's war forced adaptation of the normative framework Americans use when employing force. The RMA will require a new assessment. We must decide whether innovative military capabilities are, in fact, acceptable and desirable. That can only happen through open debate. The military must be a vital participant, but not the sole one. But as the institution most intensely aware of both the opportunities and dangers offered by emerging technology and concepts, the military must-as our notion of civil-military relations evolves to meet changing conditions-serve as a catalyst of this debate.

We must also examine the impact of the revolution in military affairs on the *structure of the U.S. national security organization* including both the policymaking apparatus and the military services. Reflecting the Cold War strategic environment, the military services are each organized around a key warfighting competency defined by geographic medium-landpower dominance, air superiority, control of the seas, power projection on the oceanic littoral. If writers like Alvin Toffler and Winn Schwartau are correct and the key to future conflict is *information*, organization of the military by geographic medium may be obsolete.[46] At a minimum, the growing importance of information suggests the need for an integrated, interservice C^4I force.[47] The same logic holds for conflict short of war: since it must be confronted with a cohesive blend of military, political, economic, and intelligence assets, organizational integration makes sense. This notion bears careful analysis in the context of changes in the global security environment and emerging technology. Organizational change which was politically impossible or undesirable in the past should be considered anew.

The military services must also assess the impact of RMA on *leader development*. Since the Army plays the largest role of any service in conflict short of war, it must take the lead in this assessment. Based on a careful analysis of recent history, Stephen Rosen concludes that neither money nor outside encouragement determines the ability of a

military to innovate. The key is acceptance by senior leaders that the nature of conflict is undergoing fundamental change. Then, Rosen argues, if "military leaders...attract talented young officers with great potential for promotion to a new way of war, and then...protect and promote them, they [can] produce new, usable military capabilities."[48] This suggests that the ultimate fate of the current revolution in military affairs will not be decided in the laboratories of the great universities, the board rooms of the major defense contractors, or even the offices of the Pentagon, but at Fort Leavenworth, in the classrooms of the Combined Arms Services and Staff School and the Command and General Staff College, and at PERSCOM.

The *cultivation of expertise* is related to leader development, but is not the same. Technological expertise should be of particular concern to the Army. Because of their roles and functions, the Air Force and Navy have traditionally emphasized technological expertise. For the Army, successful officers need branch-specific competence, interpersonal leadership and management ability, proficiency at staff functions, and, later in their careers, expertise at the operational and strategic levels of war. Technological acumen is relegated to a very few Army officers. But if an RMA is, in fact, underway, whether in conventional warfare or conflict short of war, and the Army intends to play a major role, it must develop a long-term program for cultivating technological expertise among all its officers rather than simply a tiny cadre. The same holds for nontechnological skills. If the Army is to pursue a RMA in conflict short of war, it must decide which nonmilitary skills from the worlds of law enforcement, science, intelligence, and psychology are necessary and then cultivate them throughout an officer's career. Research and analysis is also needed on *technology designed specifically for conflict short of war*. Currently, the primary advances of the RMA are in integrated, stand-off strike systems-the ability to find and destroy or disable targets by synchronized strike forces. Such capabilities form the heart of conventional, combined-arms warfare, but play only a very limited role in conflict short of war. Advances in sensors and other elements of information technology may bring great benefits to conventional, combined-arms warfare, but will have less impact in conflict short of war, which is most often won or lost through the manipulation of images, beliefs, attitudes, and perceptions.[49] These things rather than troop concentrations, command and control nodes, and transportation infrastructure are the key military targets in conflict short of war. This makes *psychological* technology much more important than strike technology. Ways must be found to use emerging technology, including advanced artificial intelligence and information dissemination systems, to help military strategists develop, implement, and continually improve methods of influencing opinion, mobilizing public support, and sometimes demobilizing it. There is also the potential for defensive pyschotechnology such as "strategic personality simulations" to aid national security decision makers.[50] To date, most analysts feel that the RMA has not generated adequate advances in such "soft war" capabilities or even the promise of such gains. But ultimate success in applying the RMA to conflict short of war hinges on the development of psychotechnology. As this emerges, it could be tested for political acceptability by using it first in non-lethal operations other than war like humanitarian relief and nation assistance.

Additional research is also needed on *defensive technology* for conflict short of war. Most current attention to defensive technology concerns protection against missiles. This is appropriate: ballistic missile proliferation poses a real and present danger to American national security. But in the arena of conflict short of war, different forms of strategic defense apply. For example, research is needed on the defense of cyberspace against politically-motivated terrorists.[51] As Winn Schwartau argues, the United States needs a national information

policy to integrate the efforts of the national security community, business, and the criminal justice system.[52] And, as public health increasingly becomes a national security issue, strategic medical defense, including buffering the effects of ecological decay and preventing the import of new resilient diseases, demands study. Finally, research is needed on the application of *biotechnology* to conflict short of war. It is possible that some of the conceptual confusion concerning the current RMA may have to do with the compression of time which is such an integral characteristic of the modern era. In the past, RMAs took years, often decades to develop. Today, two RMAs may be underway simultaneously. The first (and more mature) is electronic. Its manifestations are improved C^4I and precision strike systems. The second (and potentially more profound) RMA is biotechnological, including genetic engineering and advanced behavior-altering drugs. Because of the compression of time and the shortening of historical patterns, the biotechnical revolution is totally enmeshed with the electronic. It may ultimately be the combination of the two that proves truly revolutionary.

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Distilled to their essence, revolutions are acts of supreme creativity. The U.S. military is not inherently hostile to creativity, but is cautious. If the nation-our political and intellectual leaders and the public-decide that improving American capabilities in conflict short of war is necessary and desirable, the preeminent task for the military is to continue to build and enlarge a culture of creativity and strategic entrepreneurship among the officer corps. To some extent, this has begun. The changes leading to AirLand Battle, victory in the Gulf War, and the current RMA were supremely creative. Still, these were only first steps. To make a revolution in conflict short of war will be more difficult. But to allow technology to develop without concomitant creativity would, in the end, endanger the Nation's security.

ENDNOTES.

1. Jeffrey R. Cooper, "Another View of the Revolution in Military Affairs," a paper presented at the Fifth Annual Conference on Strategy, U.S. Army War College, Carlisle Barracks, PA, April 27, 1994, pp. 42-43.

2. See, for example, reports of the roundtables on the revolution in military affairs held for the Army, Air Force, and Navy by Science Applications International Corporation of McLean, VA, and Michael J. Mazarr, et. al., *The Military Technical Revolution*, Final Report of a CSIS Study, Washington, DC: CSIS, March 1993. Another important early work was Andrew F. Krepinevich, Jr., "The Military-Technical Revolution: A Preliminary Assessment," a report prepared for the Office of the Secretary Defense/Net Assessment (OSD/NA), July 1992.

3. Andrew F. Krepinevich, Jr., "The Coming Revolution in the Nature of Conflict: An American Perspective," in *The US Air Force Roundtable on the Revolution in Military Affairs*, a report prepared by Science Applications International Corporation, January 1994, p. 2.

4. Dan Gouré, "Is There a Military-Technical Revolution in America's Future?" *Washington Quarterly*, Vol. 16, No. 4, Autumn 1993, p. 175.

5. John Shy and Thomas W. Collier, "Revolutionary War," in Peter Paret, ed., *Makers of Modern Strategy From Machiavelli to the Nuclear Age*, Princeton, NJ: Princeton University Press, 1986, p. 852.

6. See Robert Thompson, *Defeating Communist Insurgency*, New York: Praeger, 1966; and Roger Trinquier, *Modern Warfare: A French View of Counterinsurgency*, New York: Praeger, 1967.

7. On the development of American counterinsurgency doctrine, see especially Douglas S. Blaufarb, *The Counterinsurgency Era*, New York: Free Press, 1977; Larry E. Cable, *Conflict of Myths: The Development of American Counterinsurgency Doctrine and the Vietnam War*, New York: New York University Press, 1986; and, D. Michael Shafer, *Deadly Paradigms: The Failure of U.S. Counterinsurgency Policy*, Princeton, NJ: Princeton University Press, 1988.

8. FM (Field Manual) 100-20/AFP (Air Force Pamphlet) 3-20, *Military Operations in Low Intensity Conflict,* Washington, DC: Headquarters, Departments of the Army and the Air Force, December 5, 1990.

9. *Ibid.*, pp. 2-7 through 2-14.

10. On the concepts of commercial and spiritual insurgency, see Steven Metz, *The Future of Insurgency*, Carlisle Barracks, PA: U.S. Army War College, Strategic Studies Institute, 1994.

11. For detailed analysis, see Steven Metz, *America and the Third World: Strategic Alternatives and Military Implications*, Carlisle Barracks, PA: U.S. Army War College, Strategic Studies Institute, 1994, pp. 12-24.

12. See, for example, Gordon R. Sullivan and James M. Dubik, *Land Warfare in the 21st Century*, Carlisle Barracks, PA: U.S. Army War College, Strategic Studies Institute, 1993. Also the reports of the roundtables on the revolution in military affairs held for the Army, Air Force, and Navy by Science Applications International Corporation of McClean, VA.

13. FM (Field Manual) 100-5, *Operations*, Washington, DC: Headquarters, Department of the Army, 1993, p. 13-8.

14. These are the capabilities identified as essential to future reconnaissance, surveillance, and target acquisition (RSTA) technologies in the Army's final draft Training and Doctrine Command (TRADOC) Pamphlet 525-xx, *Concept for Information Operations*, Ft. Monroe, VA: U.S. Army Training and Doctrine Command, May 5, 1994, p. 4-7.

15. Although the Army's most recent proposed doctrine in regard to Information Operations merely states: "The Army supports the timely and accurate release of information to the media as well as open and independent reporting as the principal means of coverage of U.S. military operations." TRADOC Pamphlet 525-xx, p. 2-9.

16. FM 100-20, pp. 5-5 to 5-7.

17. National Research Council, *STAR 21 (Strategic Technologies for the Army of the Twenty-first Century), Airborne Systems*, Washington DC: National Academy Press, 1993, pp. 49-55. Also Chuck de Caro, "Sats, Lies, and Video-Rape: The Soft War Handbook," unpublished paper, Aerobureau Corporation, 1994.

18. See for example the discussion in National Research Council, *STAR 21, Airborne Systems*, p. 19.

19. "Chameleon" camouflage is based on commercially available heat- and light-sensitive colorants that adapt to the surrounding environment, as well as electrically stimulated colorants that change color according to the surrounding landscape. See "Living Camouflage," *Soldiers' Magazine*, Volume 49, No. 3, March 1994, p. 9. Also National Research Council, *STAR 21, Special Technologies and Systems*, Washington DC: National Academy Press, 1993, pp. 23-24.

20. FM 100-5, pp. 13-6 and 13-7.

21. Quoted in Alvin and Heidi Toffler, *War and Anti-War: Survival at the Dawn of the 21st Century*, Boston: Little, Brown, 1993, p. 157.

22. *Ibid.*, p. 157.

23. *Ibid.*, p. 113.

24. de Caro, "Sats, Lies, and Video-Rape," pp. 32-34.

25. Winn Schwartau, *Information Warfare: Chaos on the Electronic Superhighway*, New York: Thunder's Mouth, 1994, pp. 171-176. Note that de Caro defines "soft war" as the hostile utilization of global television. "Soft kill" is used here in a more generic sense of any system designed to achieve its effect without causing harm to human beings. See National Research Council, *STAR 21, Technology Forecast Assessments*, p. 314.

26. FM 100-5, p. 13-6 .

27. Martin C. Libicki, *The Mesh and the Net: Speculations on Armed Conflict in a Time of Free Silicon*, Washington, DC: National Defense University Institute for National Strategic Studies, March 1994, p. 24. The utility of Libicki's very interesting analysis is limited by his failure to provide supporting references.

28. For a brief description of very small autonomous systems, see Richard O. Hundley and Eugene C. Gritton, *Future Technology-Driven Revolutions in Military Operations: Results of a Workshop*, Santa Monica, CA: RAND Corporation, November 1993, pp. 12-37.

29. Possible advances in biotechnology are outlined in *STAR 21, Technology Forecast Assessments*, Washington DC: National Academy Press, 1993, pp. 314-346.

30. FM 100-5, p. 13-7.

31. National Research Council, *STAR 21, Technology Forecast Assessments*, Washington DC: National Academy Press, 1993, p. 346.

32. FM 100-20, p. 2-0 and pp. 2-7 to 2-9.

33. *Ibid.*, pp. 2-17 to 2-18.

34. *Ibid.*, p. 2-22.

35. Stephen Peter Rosen, *Winning the Next War: Innovation and the Modern Military*, Ithica, NY: Cornell University Press, 1991, p. 5.

36. Quoted in Schwartau, *Information Warfare*, p. 127.

37. A classic explanation of cellular organization by insurgents is Andrew R. Molnar, *Human Factors Considerations of Undergrounds in Insurgencies*, Washington, DC: American University Center for Research in Social Systems, 1966, pp. 3-22.

38. See, as an example, Stephen Sloan, "Technology and Terrorism: Privatizing Public Violence," *Technology and Society*, Vol. 10, No. 2, Summer 1991, pp. 8-14.

39. Narcotraffickers may, in fact, respond by arming their own aircraft with conventional air-to-air weaponry. Imagine the surprise of the first DEA crew who sees, as they pass ahead of a suspected drug laden aircraft to aim their HERF gun at its vulnerable avionics, a Sidewinder exiting a

concealed cargo compartment.

40. The Army contends that its research falls within the limitations of the chemical and biological conventions. See National Research Council, *STAR 21, Technology Forecast Assessments*, pp. 314-315.

41. Tofflers, *War and Anti-War*, p. 122.

42. Michael Mazarr, an early analyst of the revolution in military affairs, considered "civilianization of war" one of the principles of the RMA. See *The Revolution in Military Affairs: A Framework for Defense Planning*, Carlisle Barracks, PA: U.S. Army War College, Strategic Studies Institute, 1994, pp. 22-27.

43. Carl Builder, "Information Technologies and the Future of Conflict," Briefing to the Office of the Assistant Secretary of Defense for Special Operations and Low Intensity Conflict (OASDSOLIC), March 23, 1994.

44. William W. Mendel, "The Cold War Returns," *Military Review*, Vol. 74, No. 5, May 1994, pp. 69-71.

45. This is described in Rod Paschall, *LIC 2010: Special Operations and Unconventional Warfare in the Next Century*, Washington: Brassey's, 1990, pp. 56-57.

46. Tofflers, *War and Anti-War*; Schwartau, *Information Warfare*.

47. For a detailed discussion, see Libicki, *The Mesh and the Net*, pp. 52-69.

48. Rosen, *Winning the Next War*, p. 252.

49. By contrast, a seminal study by the Center for Strategic and International Studies suggests that emerging sensor technologies (at least) will have equal benefits for conventional and unconventional military operations. (Mazarr, *et. al.*, *The Military Technical Revolution*, p. 44.)

50. See Norman D. Livergood and Stephen D. Williams, "Strategic Personality Simulation: A New Strategic Concept," unpublished draft paper, Carlisle Barracks, PA: U.S. Army War College, 1994.

51. For thinking on this topic, see Hundley and Gritton, *Future Technology-Driven Revolutions in Military Operations*, pp. 60-73.

52. Schwartau, *Information Warfare*, pp. 316-353.

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Mind Control:
The Ultimate Brave New World

Technologies for stimulating the brain and controlling the mind can have benefits, but they have a dark side that military and intelligence planners have been exploiting for decades.

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by Nick Begich, MD © 2006
Extracted from: "Controlling the Human Mind" 2006

It would also appear possible to create high fidelity speech in the human body, raising the possibility of covert suggestion and psychological direction... Thus, it may be possible to "talk" to selected adversaries

in a fashion that would be most disturbing to them.1
— US Air Force, *New World Vistas: Air and Space Power for the 21st Century*1

The idea that the brain can be made to function at a more efficient and directed level has been the subject of research by scientists, mystics, health practitioners and others for as long as mankind has contemplated such matters. In the last decade, advances in the science of the brain have begun to yield significant results. The results of the research are startling, challenging and, if misused, will be frightening. The certainty to be expected from the research is that it will continue to proceed.

The idea that people can be impacted by external signal generators which create, for example, pulsed electromagnetic fields, pulsed light and pulsed sound signals is not new. The following information demonstrates some of the possibilities and gives hints of the potentials of the technology. On the positive side, researchers in the field of light and sound are making huge progress in a number of areas, including working with learning disabilities, attention deficit disorders, stroke recovery, accelerated learning, drug/alcohol addiction and enhanced human performance. The research has shown that certain brain states can be influenced in a way which causes changes within the brain itself. These changes allow

individuals the possibility of influencing
specific conditions in the mind and body
otherwise thought beyond our direct control.
The military and others interested in such
things have also focused a large amount of
research into this area for the purpose of
enhancing the performance of soldiers while
degrading the performance of adversaries.
What is known is that great strides in the
area of behaviour control are now possible
with systems developed and under development
by most sophisticated countries on the
planet. These new technologies represent a
much different approach to warfare which our
government is describing as part of the
"Revolution in Military Affairs". While
these new technologies offer much for
military planners, they offer even more to
citizens generally. Their potential use in
military applications and "peacekeeping"
creates the need for open debate of this new
realm of intelligence-gathering,
manipulation and warfare. The most basic
ethical questions regarding use of these
technologies have not been adequately
addressed.
At the same time that defence and
intelligence-gathering capabilities are
being sought, independent researchers are
fully engaged in seeking positive uses for
the technology. The potentials of the
technology, like all technology, are great
as both a destructive or constructive force
for change. The idea of enhancing physical
and mental performance while bypassing what

heretofore was a long and arduous road to achieve the same results is exciting. Maintaining the research in the open literature and ensuring that constructive uses are encouraged is critical.

I began looking into technologies for stimulating brain performance about fifteen years ago. At the time, there were limited tools available compared to what is now possible. Now it is possible to obtain light and sound, electrocranial and biofeedback tools for use in this exploration. Moreover, there are audio materials also available for use with most of these tools. These audio materials can be used for learning languages, behaviour modification or enhanced performance. The biofeedback side of the new technology is being used to train people to reach specific desired brain states for optimum performance.

The use of light and sound devices for stimulating brain activity which is conducive to accelerated learning and relaxation is a growing area of interest to many people. Moreover, the use of these tools in conjunction with biofeedback has been the subject of quickly evolving research. The combined technologies of brain state inducement and biofeedback offer exciting possibilities. It has been found with the combination that a person, in a matter of several weeks, can learn to modify purposefully his/her brain activity in a way which would have taken a Zen master twenty years to accomplish. It has been shown that

some children with attention deficit disorders can be taught to regulate their brain activities so that they can learn efficiently without chemicals. It has been demonstrated that recovering stroke victims can more rapidly recover when working with brain-biofeedback practitioners and these new tools.

The research is also teaching us a good deal about our suggestibility in terms of influences which have an impact on our behaviour. The underlying message that comes with the new technology is the necessity of providing safeguards against misuse. Additionally, recognition of the everyday stimulation we all get and the effect of these information inputs on our learning processes becomes more clear. The suggestibility of humans, particularly when in a fatigued condition, has been exploited by terrorists, cults and others in pursuit of their own aims. The passive suggestibility of radio and television as we weave in and out of the semi-sleep states is for the most part not even recognised. The passive learning situations become even more relevant when we consider how we "receive the news" in our daily lives. The ability to influence thinking, behaviour and performance is indeed a two-edged sword.

The 1980s and 1990s were focused on building up the physical body. The 21st century will see a focus on building the mind and optimising mental performance. The idea of merging the new technologies into education

is interesting and also calls into question who will decide what is to be learned. In the interim, the possibilities are incredible for those interested in such pursuits. The control of our mental function is no different than the control of the muscles in our bodies. Learning to control or coordinate the activity of our minds will propel our bodies through a much more productive and fuller life. The new tools may offer just such opportunities.

On the other side of the issue is the potential for misuse and exploitation of the science. Military planners, law enforcement officials and others are now seeking the covert use of these technologies for controlling the ultimate "information processor"—the Human Being.

MK-ULTRA

"Dr Gottlieb, born August 3, 1918, was the CIA's real-life 'Dr Strangelove'—a brilliant bio-chemist who designed and headed MK-ULTRA, the agency's most far-reaching drug and mind-control program at the height of the Cold War. Though the super-secret MK-ULTRA was ended in 1964, a streamlined version called MK-SEARCH was continued—with Gottlieb in charge—until 1972."[2]

During this period, substantial interest in mind control was stimulated by Soviet use of microwaves. In 1988, "thirty-five years after security officers first noticed that the Soviets were bombarding the US embassy in Moscow with microwave radiation, the US