# 1

#### Comprehensive immigration reform is a top priority --- Obama will make an aggressive push to get it passed

Volsky, 12/30 (Igor, 12/30/2012, “Obama To Introduce Immigration Reform Bill In 2013,” <http://thinkprogress.org/justice/2012/12/30/1379841/obama-to-introduce-immigration-reform-bill-in-2013/>)

President Obama reiterated his call for comprehensive immigration reform during an interview on Meet The Press, claiming that the effort will be a top goal in his second term. “Fixing our broken immigration is a top priority. I will introduce legislation in the first year to get that done,” Obama said. Administration officials have hinted that Obama will “begin an all-out drive for comprehensive immigration reform, including seeking a path to citizenship” for 11 million undocumented immigrants, after Congress addresses the fiscal cliff. The Obama administration’s “social media blitz” will start in January and is expected “to tap the same organizations and unions that helped get a record number of Latino voters to reelect the president.” Cabinet secretaries and lawmakers from both parties are already holding initial meetings to iron out the details of the proposal and Obama will to push for a broad bill.

#### Obama’s capital and bipartisan cooperation are key to effective reform

DMN, 1/2 (Dallas Morning News, “Editorial: Actions must match Obama’s immigration pledge,” 1/2/2013, <http://www.dallasnews.com/opinion/editorials/20130102-editorial-actions-must-match-obamas-immigration-pledge.ece>)

President Barack Obama said all the right things Sunday about immigration reform. The president told NBC’s Meet the Press that he is serious about getting Congress to overhaul the laws governing immigrants. He even declared that he will introduce an immigration bill this year. This newspaper welcomes that announcement. Texans particularly understand the unique challenges that an outdated immigration system presents. Even though the flow of illegal immigrants into the U.S. has subsided in the last few years, the many holes in the system leave families, schools, businesses and law enforcement struggling. And those are just some of the constituents challenged by flawed immigration laws. The president’s words to NBC’s David Gregory are only that — words. What will really matter is whether he puts his muscle into the task this year. We suggest that Obama start by looking at the example of former President George W. Bush. Back in 2006 and 2007, the Republican and his administration constantly worked Capitol Hill to pass a comprehensive plan. They failed, largely because Senate Republicans balked. But the opposition didn’t stop the Bush White House from fully engaging Congress, including recalcitrant Republicans. Obama may have a similar problem with his own party. The dirty little secret in the 2006 and 2007 immigration battles was that some Democrats were content to let Senate Republicans kill the effort. Labor-friendly Democrats didn’t want a bill, either. And they may not want one this year. That reluctance is a major reason the president needs to invest in this fight. He must figure out how to bring enough Democrats along, while also reaching out to Republicans. In short, the nation doesn’t need a repeat of the process through which the 2010 health care legislation was passed. Very few Republicans bought into the president’s plan, leaving the Affordable Care Act open to partisan sniping throughout last year’s election. If the nation is going to create a saner immigration system, both parties need to support substantial parts of an answer. The new system must include a guest worker program for future immigrants and a way for illegal immigrants already living here to legalize their status over time. Some House Republicans will object to one or both of those reforms, so Speaker John Boehner must be persuasive about the need for a wholesale change. But the leadership that matters most will come from the White House. The president has staked out the right position. Now he needs to present a bill and fight this year for a comprehensive solution. Nothing but action will count.

#### Expanding solar power burns Obama’s political capital

NGI, 11/19 (Natural Gas Intelligence, 11/19/2012, “Obama Re-Election Puts Target on Energy, Say Execs,” Factiva)

**\*\*\*Barry Worthington is the USEA Executive Director**

President Obama "got some political capital" from the election, but "whether he's willing to spend it on renewable energy is very difficult to say," said Worthington. "I do think that the whole notion of tax credits is very, very suspect. One element says take away tax credits for renewables, others say take them all away. It's possible that it could happen."

#### Reform is key to US competitiveness

Bush, McLarty & Alden, 09 – co-chairmen and director of a Council on Foreign Relations-sponsored Independent Task Force on U.S. Immigration Policy (7/21/09, Former Florida Gov. Jeb Bush and former White House Chief of Staff Thomas F. McLarty and Edward Alden, “Nation needs comprehensive, flexible immigration reform,” http://www.ajc.com/opinion/nation-needs-comprehensive-flexible-97393.html)

Our immigration system has been broken for too long, and the costs of that failure are growing. Getting immigration policy right is fundamental to our national interests — our economic vitality, our diplomacy and our national security. In the report of the bipartisan Council on Foreign Relations’ Independent Task Force on U.S. Immigration Policy, we lay out what is at stake for the United States. President Barack Obama has made it clear that reform is one of his top priorities, and that is an encouraging and welcome signal. Immigration has long been America’s secret weapon. The U.S. has attracted an inordinate share of talented and hardworking immigrants who are enticed here by the world’s best universities, the most innovative companies, a vibrant labor market and a welcoming culture. Many leaders in allied nations were educated in the U.S., a diplomatic asset that no other country can match. And the contributions of immigrants — 40 percent of the science and engineering Ph.D.s in the U.S. are foreign-born, for example — have helped maintain the scientific and technological leadership that is the foundation of our national security. But the U.S. has been making life much tougher for many immigrants. Long processing delays and arbitrary quota backlogs keep out many would-be immigrants, or leave them in an uncertain temporary status for years. Background and other security checks are taking far too long in many cases. Other countries are taking advantage of these mistakes, competing for immigrants by opening their universities to foreign students and providing a faster track to permanent residency and citizenship.

#### Competiveness key to economy and hegemony

Segal, 04 – Senior Fellow in China Studies at the Council on Foreign Relations

(Adam, Foreign Affairs, “Is America Losing Its Edge?” November / December 2004, http://www.foreignaffairs.org/20041101facomment83601/adam-segal/is-america-losing-its-edge.html)

The United States' global primacy depends in large part on its ability to develop new technologies and industries faster than anyone else. For the last five decades, U.S. scientific innovation and technological entrepreneurship have ensured the country's economic prosperity and military power. It was Americans who invented and commercialized the semiconductor, the personal computer, and the Internet; other countries merely followed the U.S. lead. Today, however, this technological edge-so long taken for granted-may be slipping, and the most serious challenge is coming from Asia. Through competitive tax policies, increased investment in research and development (R&D), and preferential policies for science and technology (S&T) personnel, Asian governments are improving the quality of their science and ensuring the exploitation of future innovations. The percentage of patents issued to and science journal articles published by scientists in China, Singapore, South Korea, and Taiwan is rising. Indian companies are quickly becoming the second-largest producers of application services in the world, developing, supplying, and managing database and other types of software for clients around the world. South Korea has rapidly eaten away at the U.S. advantage in the manufacture of computer chips and telecommunications software. And even China has made impressive gains in advanced technologies such as lasers, biotechnology, and advanced materials used in semiconductors, aerospace, and many other types of manufacturing. Although the United States' technical dominance remains solid, the globalization of research and development is exerting considerable pressures on the American system. Indeed, as the United States is learning, globalization cuts both ways: it is both a potent catalyst of U.S. technological innovation and a significant threat to it. The United States will never be able to prevent rivals from developing new technologies; it can remain dominant only by continuing to innovate faster than everyone else. But this won't be easy; to keep its privileged position in the world, the United States must get better at fostering technological entrepreneurship at home.

#### Hegemonic decline causes great power wars – 1930’s prove

Zhang & Shi, Researcher @ The Carnegie Endowment, ’11

[Yuhan Zhang, Researcher at the Carnegie Endowment for International Peace, Lin Shi, Columbia University, Independent consultant for the Eurasia Group, Consultant for the World Bank, “[America’s decline: A harbinger of conflict and rivalry](http://www.eastasiaforum.org/2011/01/22/americas-decline-a-harbinger-of-conflict-and-rivalry/),” January 22nd 2011, <http://www.eastasiaforum.org/2011/01/22/americas-decline-a-harbinger-of-conflict-and-rivalry/>]

Over the past two decades, no other state has had the ability to seriously challenge the US military. Under these circumstances, motivated by both opportunity and fear, many actors have bandwagoned with US hegemony and accepted a subordinate role. Canada, most of Western Europe, India, Japan, South Korea, Australia, Singapore and the Philippines have all joined the US, creating a status quo that has tended to mute great power conflicts. However, [as the hegemony that drew these powers together withers](http://www.cfr.org/publication/23537/belttightening_for_us_foreign_policy.html), so will the pulling power behind the US alliance. The result will be an international order where power is more diffuse, American interests and influence can be more readily challenged, and conflicts or wars may be harder to avoid. As history attests, power decline and redistribution result in military confrontation. For example, in the late 19th century America’s emergence as a regional power saw it launch its first overseas war of conquest towards Spain. By the turn of the 20th century, accompanying the increase in US power and waning of British power, the American Navy had begun to challenge the notion that Britain ‘rules the waves.’ Such a notion would eventually see the US attain the status of sole guardians of the Western Hemisphere’s security to become the order-creating Leviathan shaping the international system with democracy and rule of law. Defining this US-centred system are three key characteristics: enforcement of property rights, constraints on the actions of powerful individuals and groups and some degree of equal opportunities for broad segments of society. As a result of such political stability, free markets, liberal trade and flexible financial mechanisms have appeared. And, with this, many countries have sought opportunities to enter this system, proliferating stable and cooperative relations. However, what will happen to these advances as America’s influence declines? Given that America’s authority, although sullied at times, has benefited people across much of Latin America, Central and Eastern Europe, the Balkans, as well as parts of Africa and, quite extensively, Asia, the answer to this question could affect global society in a profoundly detrimental way. Public imagination and academia have anticipated that a post-hegemonic world would return to the problems of the 1930s: regional blocs, trade conflicts and strategic rivalry. Furthermore, multilateral institutions such as the IMF, the World Bank or the WTO might give way to regional organisations. For example, Europe and East Asia would each step forward to fill the vacuum left by Washington’s withering leadership to pursue their own visions of regional political and economic orders. Free markets would become more politicised — and, well, less free — and major powers would compete for supremacy. Additionally, such power plays have historically possessed a zero-sum element. In the late 1960s and 1970s, US economic power declined relative to the rise of the Japanese and Western European economies, with the US dollar also becoming less attractive. And, as American power eroded, so did international regimes (such as the Bretton Woods System in 1973). A world without American hegemony is one where great power wars re-emerge, the liberal international system is supplanted by an authoritarian one, and trade protectionism devolves into restrictive, anti-globalisation barriers. This, at least, is one possibility we can forecast in a future that will inevitably be devoid of unrivalled US primacy.

# 2

#### The aff is a militarization of everyday life – they integrate the Army Core of Engineers into the background of urban space against vaguely defined threats of cyberterrorism and natural disasters – this pacifies the population to global militarism

Clement 12

(Matthew, doctoral candidate in sociology at the University of Oregon, “Neoliberalism, Imperialism, and the Militarization of Urban Spaces”, *Monthly Review*, Vol. 64, Issue 5, http://monthlyreview.org/2012/10/01/neoliberalism-imperialism-and-the-militarization-of-urban-spaces)

Meanwhile, the militarization of cities around the world, in both the core and the periphery, is the main focus of Stephen Graham’s fascinating and accessible book, Cities Under Siege. For Graham, an academic, this book represents the culmination and synthesis of much previous research on how urban issues are being incorporated into military doctrine and how military and civilian security forces are invading the cityscape. The book’s argument is organized around conceptual and empirical themes: the first part of the book examines the theoretical dimensions of what he calls the new military urbanism, and the second part offers more detailed case studies that help flesh out these conceptual issues. The end result is a theoretically and empirically rich study of how violence, control, and surveillance have come to “colonize the city landscape and the spaces of everyday life in both the ‘homelands’ and domestic cities of the West as well as the world’s neo-colonial frontiers” (xiv). Graham cites classical and contemporary research describing how urban processes have long been driven by, and have influenced, military concerns (e.g., U.S. suburbanization as a way to reduce vulnerability against a nuclear attack). Yet, he provides a detailed argument for why the contemporary form of urban militarization is novel. There are seven characteristics that distinguish the new military urbanism from the old: Western militaries are largely staffed by rural soldiers who are increasingly deployed in urban arenas. Military and civilian control technologies are blurring “into the background of urban environments, urban infrastructures and urban life” (64). Corporate media has constructed urban warfare as a spectacle to be consumed in the West. There is a surging market for security and surveillance. The movement of capital, media, and people into and out of cities is transnational, and is being militarized to protect private elite interests. The contemporary security discourse is contradictory, emphasizing territorial notions of “homeland” that imply anti-urbanism and anti-cosmopolitanism despite an increasingly urban and ethnically diverse population. Graham rhetorically asks: Is New York City a homeland? State violence is used to evict people from rural communities and informal urban settlements to clear space for future accumulation. While these are the seven characteristics of the new military urbanism, Graham argues that neoliberalism and imperialism play central roles in the militarization of urban spaces. These forces have turned many cities in the global South into the “feral” spaces that are increasingly feared and targeted by Western militaries (see the discussion in Planet of Slums on the “little witches of Kinshasa”). Yet, the militarization of cities, both in the core and periphery, is an interdependent process. Referring to Foucault, Graham conceptualizes this interdependence as the “boomerang effect,” which represents the multidirectional sharing of information by police departments and militaries around the world to better prepare for warfare in the city landscape. For instance, as Graham cites, separate urban conflicts in the United States and Israel have resulted in collaboration between these two nations to develop “non-lethal weapons,” some of which are now being deployed in both countries. We see an example of this in the use of “sonic weapons, which broadcast beams of sounds that are so loud as to make continued presence in a targeted area unbearably dizzying and nauseating” (246). These sonic weapons have been used in anti-capitalist protests; even the corporate news took notice of their use at the G20 summit in Pittsburgh in September 2009. But often, the intended consequences of the new military urbanism are not as “non-lethal” as sonic weapons; just consider Graham’s discussion about the emergence of “shoot-to-kill” policies by police departments around the world to deal with suspected suicide bombers. Nor are these consequences as direct and immediate as they are in the use of weapons. Indeed, the new military urbanism is insidious, pervasive, and global. For example, Graham makes connections between escalating incarceration rates in the United States and the global war on terror. While the New York Police Department has set up offices around the globe, the U.S. incarceration system, in general, “is paralleled by the construction of a global system of extraordinary rendition…with both systems using similar techniques, private security corporations, means of abuse, and legal suspensions” (110). The rights of both citizens and non-citizens are being undermined in what has been called the “securocratic war”: a battle intended to protect public safety against vaguely defined enemies who “lurk within the interstices of urban and social life, blending invisibly with it” (91).

#### The militarization of urban life collapses the public sphere, creates massive structural violence, and generates a culture of fear – that psychologically primes the population for war and escalation

Scheper-Hughes and Bourgois ‘4

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(Nancy and Philippe, Introduction: Making Sense of Violence, in Violence in War and Peace, pg. 19-22)

This large and at first sight “messy” Part VII is central to this anthology’s thesis. It encompasses everything from the routinized, bureaucratized, and utterly banal violence of children dying of hunger and maternal despair in Northeast Brazil (Scheper-Hughes, Chapter 33) to elderly African Americans dying of heat stroke in Mayor Daly’s version of US apartheid in Chicago’s South Side (Klinenberg, Chapter 38) to the racialized class hatred expressed by British Victorians in their olfactory disgust of the “smelly” working classes (Orwell, Chapter 36). In these readings violence is located in the symbolic and social structures that overdetermine and allow the criminalized drug addictions, interpersonal bloodshed, and racially patterned incarcerations that characterize the US “inner city” to be normalized (Bourgois, Chapter 37 and Wacquant, Chapter 39). Violence also takes the form of class, racial, political self-hatred and adolescent self-destruction (Quesada, Chapter 35), as well as of useless (i.e.  preventable), rawly embodied physical suffering, and death (Farmer, Chapter 34).  Absolutely central to our approach is a blurring of categories and distinctions between wartime and peacetime violence. Close attention to the “little” violences produced in the structures, habituses, and mentalites of everyday life shifts our attention to pathologies of class, race, and gender inequalities. More important, it interrupts the voyeuristic tendencies of “violence studies” that risk publicly humiliating the powerless who are often forced into complicity with social and individual pathologies of power because suffering is often a solvent of human integrity and dignity. Thus, in this anthology we are positing a violence continuum comprised of a multitude of “small wars and invisible genocides” (see also Scheper- Hughes 1996; 1997; 2000b) conducted in the normative social spaces of public schools, clinics, emergency rooms, hospital wards, nursing homes, courtrooms, public registry offices, prisons, detention centers, and public morgues. The violence continuum also refers to the ease with which humans are capable of reducing the socially vulnerable into expendable nonpersons and assuming the license - even the duty - to kill, maim, or soul-murder. We realize that in referring to a violence and a genocide continuum we are flying in the face of a tradition of genocide studies that argues for the absolute uniqueness of the Jewish Holocaust and for vigilance with respect to restricted purist use of the term genocide itself (see Kuper 1985; Chaulk 1999; Fein 1990; Chorbajian 1999). But we hold an opposing and alternative view that, to the contrary, it is absolutely necessary to make just such existential leaps in purposefully linking violent acts in normal times to those of abnormal times. Hence the title of our volume: Violence in War and in Peace. If (as we concede) there is a moral risk in overextending the concept of “genocide” into spaces and corners of everyday life where we might not ordinarily think to find it (andthere is), an even greater risk lies in failing to sensitize ourselves, in misrecognizing protogenocidal practices and sentiments daily enacted as normative behavior by “ordinary” good-enough citizens. Peacetime crimes, such as prison construction sold as economic development to impoverished communities in the mountains and deserts of California, or the evolution of the criminal industrial complex into the latest peculiar institution for managing race relations in the United States (Waquant, Chapter 39), constitute the “small wars and invisible genocides”to which we refer. This applies to African American and Latino youth mortality statistics in Oakland, California, Baltimore, Washington DC, and New York City. These are “invisible” genocides not because they are secreted away or hidden from view, but quite the opposite.  As Wittgenstein observed, the things that are hardest to perceive are those which are right before our eyes and therefore taken for granted. In this regard, Bourdieu’s partial and unfinished theory of violence (see Chapters 32 and 42) as well as his concept of misrecognition is crucial to our task. By including the normative everyday forms of violence hidden in the minutiae of “normal” social practices - in the architecture of homes, in gender relations, in communal work, in the exchange of gifts, and so forth - Bourdieu forces us to reconsider the broader meanings and status of violence, especially the links between the violence of everyday life and explicit political terror and state repression, Similarly, Basaglia’s notion of “peacetime crimes” - crimini di pace - imagines a direct relationship between wartime and peacetime violence. Peacetime crimes suggests the possibility that war crimes aremerely ordinary, everyday crimes of public consent applied systematically and dramatically in the extreme context of war. Consider the parallel uses of rape during peacetime and wartime, or the family resemblances between the legalized violence of US immigration and naturalization border raids on “illegal aliens” versus the US government- engineered genocide in 1938, known as the Cherokee “Trail of Tears.” Peacetime crimes suggests that everyday forms of state violence make a certain kind of domestic peace possible.  Internal “stability” is purchased with the currency of peacetime crimes, many of which take the form of professionally applied “strangle-holds.” Everyday forms of state violence during peacetime make a certain kind of domestic “peace” possible. It is an easy-to-identify peacetime crime that is usually maintained as a public secret by the government and by a scared or apathetic populace. Most subtly, but no less politically or structurally, the phenomenal growth in the United States of a new military, postindustrial prison industrial complex has taken place in the absence of broad-based opposition, let alone collective acts of civil disobedience. The public consensus is based primarily on a new mobilization of an old fear of the mob, the mugger, the rapist, the Black man, the undeserving poor. How many public executions of mentally deficient prisoners in the United States are needed to make life feel more secure for the affluent? What can it possibly mean when incarceration becomes the “normative” socializing experience for ethnic minority youth in a society, i.e., over 33 percent of young African American men (Prison Watch 2002).  In the end it is essential that werecognize the existence of a genocidal capacity among otherwise good-enough humans and that we need to exercise a defensive hypervigilance to the less dramatic, permitted, and even rewarded everyday acts of violence that render participation in genocidal acts and policies possible (under adverse political or economic conditions), perhaps more easily than we would like to recognize. Under the violence continuum we include, therefore, all expressions of radical social exclusion, dehumanization, depersonal- ization, pseudospeciation, and reification which normalize atrocious behavior and violence toward others. A constant self-mobilization for alarm, a state of constant hyperarousal is, perhaps, a reasonable response to Benjamin’s view of late modern history as a chronic “state of emergency” (Taussig, Chapter 31). We are trying to recover here the classic anagogic thinking that enabled Erving Goffman, Jules Henry, C. Wright Mills, and Franco Basaglia among other mid-twentieth-century radically critical thinkers, to perceive the symbolic and structural relations, i.e., between inmates and patients, between concentration camps, prisons, mental hospitals, nursing homes, and other “total institutions.” Making that decisive move to recognize the continuum of violence allows us to see the capacity and the willingness - if not enthusiasm - of ordinary people, the practical technicians of the social consensus, to enforce genocidal-like crimes against categories of rubbish people. There is no primary impulse out of which mass violence and genocide are born, it is ingrained in the common sense of everyday social life.  The mad, the differently abled, the mentally vulnerable have often fallen into this category of the unworthy living, as have the very old and infirm, the sick-poor, and, of course, the despised racial, religious, sexual, and ethnic groups of the moment. Erik Erikson referred to “pseudo- speciation” as the human tendency to classify some individuals or social groups as less than fully human - a prerequisite to genocide and one that is carefully honed during the unremark- able peacetimes that precede the sudden, “seemingly unintelligible” outbreaks of mass violence. Collective denial and misrecognition are prerequisites for mass violence and genocide. But so are formal bureaucratic structures and professional roles. The practical technicians of everyday violence in the backlands of Northeast Brazil (Scheper-Hughes, Chapter 33), for example, include the clinic doctors who prescribe powerful tranquilizers to fretful and frightfully hungry babies, the Catholic priests who celebrate the death of “angel-babies,” and the municipal bureaucrats who dispense free baby coffins but no food to hungry families.  Everyday violence encompasses the implicit, legitimate, and routinized forms of violence inherent in particular social, economic, and political formations. It is close to what Bourdieu (1977, 1996) means by “symbolic violence,” the violence that is often “nus-recognized” for something else, usually something good. Everyday violence is similar to what Taussig (1989) calls “terror as usual.” All these terms are meant to reveal a public secret - the hidden links between violence in war and violence in peace, and between war crimes and “peace-time crimes.” Bourdieu (1977) finds domination and violence in the least likely places - in courtship and marriage, in the exchange of gifts, in systems of classification, in style, art, and culinary taste- the various uses of culture. Violence, Bourdieu insists, is everywhere in social practice. It is misrecognized because its very everydayness and its familiarity render it invisible. Lacan identifies “rneconnaissance” as the prerequisite of the social. The exploitation of bachelor sons, robbing them of autonomy, independence, and progeny, within the structures of family farming in the European countryside that Bourdieu escaped is a case in point (Bourdieu, Chapter 42; see also Scheper-Hughes, 2000b; Favret-Saada, 1989).  Following Gramsci, Foucault, Sartre, Arendt, and other modern theorists of power-vio- lence, Bourdieu treats direct aggression and physical violence as a crude, uneconomical mode of domination; it is less efficient and, according to Arendt (1969), it is certainly less legitimate.  While power and symbolic domination are not to be equated with violence - and Arendt argues persuasively that violence is to be understood as a failure of power - violence, as we are presenting it here, is more than simply the expression of illegitimate physical force against a person or group of persons. Rather, we need to understand violence as encompassing all forms of “controlling processes” (Nader 1997b) that assault basic human freedoms and individual or collective survival. Our task is to recognize these gray zones of violence which are, by definition, not obvious. Once again, the point of bringing into the discourses on genocide everyday, normative experiences of reification, depersonalization, institutional confinement, and acceptable death is to help answer the question: What makes mass violence and genocide possible? In this volume we are suggesting that mass violence is part of a continuum, and that it is socially incremental and often experienced by perpetrators, collaborators, bystanders - and even by victims themselves - as expected, routine, even justified. The preparations for mass killing can be found in social sentiments and institutions from the family, to schools, churches, hospitals, and the military. They harbor the early “warning signs” (Charney 1991), the “priming” (as Hinton, ed., 2002 calls it), or the “genocidal continuum” (as we call it) that push social consensus toward devaluing certain forms of human life and lifeways from the refusal of social support and humane care to vulnerable “social parasites” (the nursing home elderly, “welfare queens,” undocumented immigrants, drug addicts) to the militarization of everyday life (super-maximum-security prisons, capital punishment; the technologies of heightened personal security, including the house gun and gated communities; and reversed feelings of victimization).

#### The alternative is to vote neg to use the public sphere as a vehicle for grid contingency planning

#### Only active construction of civic spaces and discourse of public life can act as a mechanism to counter the militarization of society

Giroux ‘12

(Henry A Giroux, Frequent author on pedagogy in the public sphere, Truthout, “Youth in Revolt: The Plague of State-Sponsored Violence,” March 14, 2012, <http://truth-out.org/index.php?option=com_k2&view=item&id=7249:youth-in-revolt-the-plague-of-statesponsored-violence>)

All of these issues are important, but what must be addressed in the most immediate sense is the threat the emerging police state in the United States poses not to just the young protesters occupying a number of American cities, but also the threat it poses to democracy itself as a result of the merging of a war-like mentality and neoliberal mode of discipline and education in which it becomes difficult to reclaim the language of obligation, social responsibility and civic engagement. Unless the actions of young protesters, however diverse they may be, is understood within the language of a robust notion of the social, civic courage and the imperatives of a vital democracy, it will be difficult for the American public to resist state violence and the framing of protests, dissent and civic responsibility as un-American or, at worst, a species of criminal behavior. While there is considerable coverage in the progressive media given to the violence being waged against the Occupy movement protesters, I want to build on these analyses by arguing that it is important to situate such violence within a broader set of categories that enables a critical understanding of not only the underlying social, economic and political forces at work in such assaults, but also allows us to reflect critically on the distinctiveness of the current historical period in which they are taking place. For example, it is difficult to address such state-sponsored violence against young people without analyzing the devolution of the social state and the corresponding rise of the warfare and punishing state. The notion of historical conjuncture is important here because it provides both an opening into the forces shaping a particular historical moment and it allows for a merging of theory and strategy. That is, it helps us to address theoretically how youth protests are largely related to a historically specific neoliberal project that promotes vast inequalities in income and wealth, creates the student loan debt bomb, eliminates much needed social programs, eviscerates the social wage and privileges profits and commodities over people. Within the United States, the often violent response to nonviolent forms of youth protests must also be analyzed within the framework of a mammoth military-industrial state and its commitment to war and the militarization of the entire society. As Tony Judt put it, "The United States is becoming not just a militarized state but a military society: a country where armed power is the measure of national greatness and war, or planning is the exemplary (and only) common project."(7) The merging of the military-industrial complex and unbridled corporate power points to the need for strategies that address what is specific about the current warfare state and the neoliberal project and how different interests, modes of power, social relations, public pedagogies and economic configurations come together to shape its politics. Such a conjuncture is invaluable politically in that it provides a theoretical opening for making the practices of the warfare state and the neoliberal revolution visible in order "to give the resistance to its onward march, content, focus and a cutting edge."(8) It also points to the conceptual power of making clear that history remains an open horizon that cannot be dismissed through appeals to the end of history or end of ideology.(9) It is precisely through the indeterminate nature of history that resistance becomes possible and politics refuses any guarantees and remains open. Following Stuart Hall, I want to argue that the current historical moment or what he calls the "long march of the Neoliberal Revolution,"(10) has to be understood in terms of the growing forms of violence that it deploys and reinforces. Such anti-democratic pressures and their relationship to the rising protests of young people in the United States and abroad are evident in the crisis that has emerged through the merging of governance and violence, the growth of the punishing state and the persistent development of what has been described by Alex Honneth as "a failed sociality."(11) The United States has become addicted to violence and this dependency is fuelled increasingly by its willingness to wage war at home and abroad. War in this instance is not merely the outgrowth of polices designed to protect the security and well-being of the United States. It is also, as C. Wright Mills pointed out, part of a "military metaphysics"(12) - a complex of forces that includes corporations, defense industries, politicians, financial institutions and universities. War provides jobs, profits, political payoffs, research funds and forms of political and economic power that reach into every aspect of society. War is also one of the nation's most honored virtues, and its militaristic values now bear down on almost every aspect of American life.(13) As war becomes a mode of sovereignty and rule, it erodes the distinction between war and peace. Increasingly fed by a moral and political hysteria, warlike values produce and endorse shared fears as the primary register of social relations. Shared fears and the media hysteria that feed them produce more than a culture of fear. Such hysteria also feeds the growing militarization of the police, who increasingly use their high-tech scanners, surveillance cameras and toxic chemicals on anyone who engages in peaceful protests against the warfare and corporate state. Images abound in the mainstream media of such abuses. There is the now famous image of an 84-year-old woman looking straight into a camera, her face drenched in a liquid spray used by the police after attending a protest rally. There is the image of a woman, who is two months pregnant, being carried to safety after being pepper sprayed by the police. There are the all-too-familiar images of young people being dragged by their hair across a street to a waiting police van.(14) In some cases, protesters have been seriously hurt as in the case of Scott Olsen, an Iraqi war veteran, who was critically injured in a protest in Oakland in October 2011. Too much of this violence is reminiscent of the violence used against civil rights demonstrators by the forces of Jim Crow in the fifties and sixties.(15)

# 3

#### Interpretation – Financial incentives reduce producer costs – that’s distinct from increasing demand

Benson 7 – J.D, University of Iowa (Christine C., Winter, “STUDENT NOTE: Putting Your Money Where Your Mouth Is: The Varied Success of Biofuel Incentive Policies in the United States and the European Union”, 16 Transnat'l L. & Contemp. Probs. 633, Lexis Law)

There are two main ways a government can promote an industry requiring support to survive and prosper. A government may use financial incentives to reduce costs to the industry at one or several points in the chain of production. n139 A government may also use regulatory mandates to impose a minimum usage requirement for certain products produced by the industry. n140

Both the United States and the EU have implemented mandates in regard to biofuels. n141 Mandates are structured goals that a government lays out for an industry to accomplish, and a government usually provides a date by which those goals should be met. n142 Mandates allow a government to define and promote a structured policy, and financial incentives provide the [\*650] means of assistance for implementing that policy. n143 Therefore, mandates are usually accompanied by some type of financial incentive. n144

Financial incentives take many forms. Loans, grants, production payments, tax credits or deductions, and tax exemptions all provide some type of financial assistance. n145 Loans and grants generally promote the development of an industry's infrastructure, research, and development. n146 Tax incentives are generally more focused on promoting long-term production of a product. n147 This Note focuses only on tax incentives, not loan and grant programs, for biofuels in the United States and the EU.

#### Violation – the Aff is a NON-financial incentive

Czinkota et al, 9 - Associate Professor at the McDonough School of Business at Georgetown University (Michael, Fundamentals of International Business, p. 69 – google books)

Incentives offered by policymakers to facilitate foreign investments are mainly of three types: fiscal, financial, and nonfinancial. Fiscal incentives are specific tax measures designed to attract foreign investors. They typically consist of special depreciation allowances, tax credits or rebates, special deductions for capital expenditures, tax holidays, and the reduction of tax burdens. Financial incentives offer special funding for the investor by providing, for example, land or buildings, loans, and loan guarantees. Nonfinancial incentives include guaranteed government purchases; special protection from competition through tariffs, import quotas, and local content requirements, and investments in infrastructure facilities.

#### Vote Neg:

#### Predictable Limits – We added a qualifier to the word “incentive” precisely because it was too broad – Including non-financial incentives explodes the topic by several new ways of doing every aff. Prefer our interpretation because it creates a clear, predictable line between incentives that change production costs per unit and mandates that increase overall demand.

#### Ground – Testing the “financial” in financial incentive is core neg CP and solvency ground – using a non-financial mechanism guts DA links too because the way voters and markets react to subsidies and tax breaks is substantially different than to a minor change in what the government decides to buy.

# 4

#### Interpretation –

#### Incentives are direct support for a specific activity

Doris, NREL researcher, 12

(Elizabeth Doris, researcher at the National Renewable Energy Laboratory, “Policy Building Blocks: Helping Policymakers Determine Policy Staging for the Development of Distributed PV Markets,” Paper to be presented at the 2012 World Renewable Energy Forum, 5/13-5/17, <http://www.nrel.gov/docs/fy12osti/54801.pdf>)

3.3 Market Expansion

This stage of policy development targets the development of projects and includes both incentives that attempt to distribute the high first costs of distributed technologies and policies that facilitate project installation. The purpose of this category is to increase the installation of individual projects through monetizing the non-economic benefits of distributed generation for the developer. Because the value of those benefits vary in different contexts, these policies can be politically challenging to put in place and technically challenging to design and implement. There is a large body of literature (encompassing the energy field as well as other fields) that discusses the design and implementation of effective market incentives. Specific policy types include:

• Incentives. In the context of this framework, incentives are defined as direct monetary support for specific project development. Incentives, especially in the current economic environment, can be politically challenging to implement and require detailed design to ensure that they are effectively reaching the intended market at levels that spur development without creating over-subsidization. Because of the complications and expense of these types of policies, they are most used and most cost-effective in environments where the market is prepared for project development. There are three primary types of incentives:

• Investment incentives directly alter the first cost of technologies. These incentives can take the form of grants, rebates, or tax incentives, depending on the market needs. Grants are typically applied to larger scale projects and are paid in advance of development, and so target development that would not take place without advance investment. Rebates are most commonly based on equipment purchases and can be applied at the time of purchase or through a post-purchase mechanism. Tax incentives can be deductions or credits, can be applied to entire installations, and are applied after purchase, annually. Tax incentives target development that does not need direct capital investment, but instead prioritizes reduction in pay-back period.

• Production incentives provide payment for electricity produced from the distributed electricity. These are different from net metering because the aim is not to provide the economic value of electricity sold into the grid, but instead, to monetize the indirect benefits of distributed generation and apply that on a production basis to projects. These incentives do not directly remove the challenge of higher first costs, and so are most effective in situations in which those high first costs can be spread over the course of the project lifetime (e.g., where direct priori investment is not a priority). In the last decade, incentives for distributed generation have tended toward the production type, because it assures the public that the investment is resulting in clean energy development (whereas investment incentives have the potential to be invested in projects that do not materialize).

• Feed-in-Tariffs. This incentive type reduces investment risk by providing fixed payments for projects based on the levelized cost of renewable energy generation. This (among other design characteristics) distinguishes feed-in-tariffs from production-based incentives, which are based on monetizing the value of the electricity to the grid or the value to the electricity purchaser.

#### “For” means the incentive must directly influence energy production

WORDS AND PHRASES 04

(Words and Phrases Permanent Edition, “For,” Volume 17, p. 338-343)

W.D.Tenn. 1942. The Fair Labor Standards Act of 1938 uses the words “production for commerce” as denoting an intention to deal in a restricted way with question of coverage in connection with those employed directly in production of articles to be sold, shipped or transported across state lines in commerce, producing goods “for” a certain purpose implying a direct relation as distinguished from producing something which only “affects” a certain purpose which implies an indirect relation.

#### Energy production of solar power is the generation of electricity or direct use of thermal energy

US EIA (Energy Information Administration) - October 19, 2011, Annual Energy Review 2010, http://www.eia.gov/totalenergy/data/annual/pdf/aer.pdf

Primary Energy Production: Production of primary energy. The U.S. Energy Information Administration includes the following in U.S. primary energy production: coal production, waste coal supplied, and coal refuse recovery; crude oil and lease condensate production; natural gas plant liquids production; dry natural gas—excluding supplemental gaseous fuels—production; nuclear electricity net generation (converted to Btu using the nuclear heat rates); conventional hydroelectricity net generation (converted to Btu using the fossil-fuels heat rates); geothermal electricity net generation (converted to Btu using the fossil-fuels heat rates), and geothermal heat pump energy and geothermal direct use energy; solar thermal and photovoltaic electricity net generation (converted to Btu using the fossilfuels heat rates), and solar thermal direct use energy; wind electricity net generation (converted to Btu using the fossil-fuels heat rates); wood and wood-derived fuels consumption; biomass waste consumption; and biofuels feedstock.

#### Violation – The aff does not incentivize the process of transforming solar energy into electricity, it only supports the creation of equipment/facilities that MIGHT produce electricity LATER

#### Vote Neg

#### Predictable Limits – There are hundreds of factors that influence whether solar power gets produced – Allowing affs to promote factors of production means they could incentivize students to go into STEM or subsidize R&D. Only requiring the aff’s incentive be CONTINGENT on production creates a predictable limit on aff mechanisms

#### Ground – Incentivizing capital instead of production means the aff doesn’t have to defend “production good.” At best they are effectually topical which guts stable CP and DA ground and forces us to concede solvency to get back to square 1.

# 5

#### Text: The State of California should procure mobile solar power systems to provide for the California Emergency Management Agency’s training exercises and operations in response to emergencies in the United States.

#### The counterplan solves --- it is a California based company that is building mobile solar power systems to help with emergencies

Holloway, 12 (5/29/2012, James, “California start-up inks FEMA deal to provide disaster relief solar villages,” <http://www.gizmag.com/green-horizon-quickhab/22719/>)

Following five years of research and development, California start-up and provider of disaster relief technology Green Horizon has begun shipping a solar-powered services hub capable of providing electricity and clean water to disaster-hit communities. Combined with its QuickHab and SFH40 rapid-assembly prefabricated homes, Green Horizon has come up with a trio of rapid-response technologies that the company hopes will transform our responses to natural disasters by providing, essentially, rapid-assembly solar powered villages.

San Francisco builder James Pope was compelled to develop a practical relief shelter following Hurricane Katrina, when thousands of trailers provided to victims by FEMA were found to emit formaldehyde fumes. Five years after setting up Green Horizon, the result is the QuickHab prefabricated home designed for simple and rapid transport and construction.

Pope has compared the QuickHab to LEGO due to the ease with which the standardized panels ...

Pope has compared the QuickHab to LEGO due to the ease with which the standardized panels which comprise the house fit together. Being essentially a kit that fits inside a shipping container, once delivered to the disaster zone, it can be put together in mere hours to provide a temporary home for two people. For the medium to long term, the QuickHab is also designed for rapid disassembly and relocation. With the right foundations, Green Horizon says it can be deployed as permanent housing.

Though the QuickHab looks simple, functionally it offers more than mere shelter. Each unit is equipped with a water heater, shower, toilet and kitchenette. There are standardized connections for electricity, water and sewerage. It even comes with a lockable front door, which, despite the obvious practical advantages is a very human touch (imagine offering someone their own door key within hours of their losing their home).

It's well and good to have connections for essential services, but with nothing to connect them to, a shower or electric hob is useless. The supply of clean drinking water after natural disasters such as hurricanes is one of the most critical short-term responses. It's to this end that Green Horizon developed its Central Service Unit, which provides both power and clean water to disaster-hit communities.

Each CSU is equipped with a solar array with a capacity of 74 kW

Each CSU is equipped with a solar array with a capacity of 74 kW. This is complimented by a 12 kW back-up diesel generator and 5 kW hydrogen fuel cell, all of which are wired to the CSU's 24 deep-cycle batteries. Its water filtration system can provide 19,000 US gallons (72,000 liters) of potable water per day, and it provides an additional 2000 US gallons (7600 liters) of gray-water via a separate system. The CSU can also provides communications, including Wi-Fi internet access, telephone and cable. Also designed for containerized shipping, a CSU, once assembled, can withstand 150-mph winds. The idea is that one CSU provides all incoming services to up to 20 QuickHab homes.

The final piece of the puzzle is Green Horizon's SFH40. Perhaps best described as a larger, more adaptable version of the QuickHab, the SFH40 includes an air conditioning system, 30-US gallon (114-liter) hot water tank, heat pump, kitchen and bathroom. It can provide housing for up to six people.

Perhaps best described as a larger, more adaptable version of the QuickHab, the SFH40 incl...

Each CSU costs approximately US$200,000, and each QuickHab about $ Green Horizon negotiated a $25 million deal with FEMA at the beginning of the year for the provision of rapid-response housing. In addition to disaster relief, Green Horizon is pitching its self-sustaining housing sytem at mining and fuel prospectors and the military.5,000.

# 6

#### The United States Federal Government should substantially increase investment in smart microgrid technology for domestic military bases via a diverse portfolio tailored to individual installation circumstances, including non-nuclear renewable energies for on-site generation, increased backup generation capacity, improvements in energy efficiency and energy storage, intelligent local energy management, and accelerated implementation of the SPIDERS project.

#### Smart grids solve --- provide information to quickly resolve outages

Goldsmith, 11/16 --- professor of government at the Harvard Kennedy School (11/16/2012, Stephen, “How a Smart Grid Can Get the Lights Back on Faster,” <http://www.governing.com/blogs/bfc/col-smart-grid-meters-electricity-outage-hurricane-sandy.html>)

Sandy's claiming of the title as the second most costly hurricane in U.S. history shows us the advantages and limitations of rigorous planning. The slow and arduous recovery faced by some East Coast communities has been coupled with the impressive speed with which many other communities have been able to return to business as usual. New emergency procedures put in place at the local and state levels deserve a lot of the credit. These included shutting down infrastructure and battening the hatches to protect vital resources and prepare for recovery. Yet the storm teaches us that the best way to plan for the truly unexpected will be by being prepared to to improvise and by understanding that resilience in times of disaster isn't determined only by a static disaster plan but to a greater degree by being dynamic and responsive to change. Being dynamic requires real-time data. Recent technologies are beginning to provide more access to more data, allowing analytics to find the patterns fast enough to make it useful during a disaster. Smart grids, and particularly smart electric meters, played a promising role in improving disaster response and the speed with which power could be restored after Sandy passed. That role was small-scale and local, since electric utilities' conversion to smart-grid technology has been slower and spottier than desired, but the potential is there for the technology to have a much larger impact as these systems are rolled out more widely.At best, phone calls and spotty service-outage reports can slowly piece together a hazy picture of the conditions of a power network. But smart meters, programmed to send out a "last call of distress" when power is lost, can automatically report service cuts. This gives a utility company instant access to regional maps of outages, allowing it to prioritize repair-crew mobilization and begin getting service back to customers without them even having to report an outage. Smart meters also can help identify the locations of particularly tricky "nested" outages, when more than one break is affecting an area. Additionally, smart meters can automatically report getting back on line when power is restored, eliminating unnecessary calls between the utility company and customers or follow-up service-crew visits. Repair crews can move on to the next repair rather than spending time checking on their last one, increasing efficiency and reducing system repair time considerably.

#### Microgrids solve grid reliability

Robert K. Ackerman, SIGNAL Magazine - February 2012, Military Energy Enters SPIDERS Web, http://www.afcea.org/content/?q=node/2877

No man may be an island, but each U.S. military base may become an energy island if a joint project among the Department of Energy, the Department of Homeland Security and the Defense Department comes to fruition. The effort aims to develop a microgrid that would supply a base with internal power independent of any external source that might fail as a result of enemy action. Network security would be a key element of this energy microgrid. Facing the possibility of a cyberattack on the nation’s power grid, military bases must be able to sustain internal power with a degree of immunity from the online tactics employed by cybermarauders. This program also seeks to blend a host of conventional and alternative energy sources into a single entity that would respond seamlessly to internal base power demands. Complicating the endeavor to link these energy sources is the requirement to provide secure network control that could interoperate with the public power grid but still be immune to cyberthreats that menace the larger network. Known as the Smart Power Infrastructure Demonstration for Energy Reliability and Security, or SPIDERS, the project is a Defense Department joint capability technology demonstration (JCTD). It already is underway at Joint Base Pearl Harbor-Hickam, Oahu, Hawaii, and later phases will evaluate progressively sophisticated systems at Fort Collins, Colorado, and Camp Smith, Hawaii. Melanie Johnson, an electrical engineer with the Army Corps of Engineers Construction Engineering Research Laboratory, explains that SPIDERS is designed to develop a template for bringing microgrid technology to military installations in the United States. Its success would have implications for installations outside the United States, particularly in operational settings, she points out. Part of the SPIDERS technical management team, Johnson explains that a key element in SPIDERS is to provide network security for the communications and control systems within that microgrid environment. That security would be vital if a base loses power because of a cyberattack on the local power grid. What sets SPIDERS apart from other microgrid efforts is its emphasis on cybersecurity and network communications. Security is a primary SPIDERS objective, Johnson says, adding that this includes information assurance certification and implementing emerging standards from the National Institute of Standards and Technology (NIST), the North American Electric Reliability Corporation (NERC) and Department of Energy organizations. Adding cybersecurity to the microgrid complicates the picture and requires “a little critical thinking,” Johnson observes. However, SPIDERS is not employing the traditional approach of first developing a control system and then overlaying security. Instead, security will be integrated into the system as it is developed. The result will be a comprehensive security solution that is tailored to the system, she offers. The microgrid control system continually will monitor power quality and conditions in the regional power grid. If it detects instability or significant quality issues, it can alert monitors who would decide to disconnect the base from the external grid. The microgrid would continue to provide power to critical missions. Johnson shares that planners are examining the relationship between the interface with the microgrid control system and the base’s enterprise network. Of particular interest is how that relationship would open the microgrid to vulnerabilities from outside the installation. Issues include the types of communications traffic that would be allowed in and out of the microgrid control system network. According to its guidance, SPIDERS’ primary objectives are to protect task-critical assets from power loss due to cyberattack; integrate renewable and other distributed generational electricity to power task-critical assets in times of emergency; sustain critical operations during prolonged power outages; and manage installation electrical power consumption to reduce petroleum demand and carbon footprint. SPIDERS will exploit existing energy assets such as solar arrays, wind generators and other renewable technologies as well as diesel generators to provide electricity more efficiently than if backup diesel generators alone were used. Renewable energy generators remain online constantly, providing electricity from alternate sources during opportune conditions such as windy or sunny days. Johnson points out, however, that most renewable energy resources trip offline when the main grid crashes. The microgrid allows the renewable power to stay online while maintaining necessary safety measures. The program might tweak the bases’ energy sources by upgrading a legacy generator that lacks the necessary capacity, for example. Otherwise, it will focus on existing assets. Johnson emphasizes that SPIDERS will be energy-source agnostic.

# Case

Risk of great power war’s present ---

Commander Gregory E. McRae 9, US Navy, Reconceptualizing the Global War on Terror, March, 2009, http://www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA498760

Wars are waged by politicians who are charged with protecting the interests of a population or a culture or ethnicity. As Clausewitz said, “war is an extension of policy (political intercourse) by other or alternative means.”28 One has to view political intercourse here to encompass all groups of people with leaders making decisions for the group, whether they are religious, cultural, or state-based. As discussed earlier, political does not have to mean nation-state politics. Clearly political groups fight over interests, but there’s more to it than that. The Commission on America’s National Interests identified four prioritized categories of national interests ranging from high to low intensity (Survival, Vital, Important, Peripheral).29 The presumption is that a nation’s likelihood of going to war is highest for interests related to survival and lowest for peripheral interests. History has shown that populations fight over actual or perceived credibility, honor, natural resources, international structure, power and fear. Most political organizations tend to fight for one of these reasons. In the Peloponnesian War, the Melians fought out of honor.30 Similarly, for the Pashtuns in modern day Afghanistan, honor is the driving force behind their decision-making. Wars are fought by political organizations for the reasons previously discussed. These political organizations include states as well as non-state actors, ethnic groups such as the ethnic Serbians, religious groups such as Hezbollah or the Irish Republican Army, and cultural groups such as the victims of apartheid in South Africa. Wars are fought by armed representatives of political groups whose leaders have declared war with other political entities. These representatives most often come from the population of the political group waging war, and may be volunteers or conscripts. In some cases throughout history, professional warriors have been used to wage war on behalf or in support of a political group. Take, for example, the Cossacks involvement in fighting on behalf of Russia against Napoleon in the early 19th century.31 Policy is driven by politicians, and war is a continuation of policy, therefore, politicians must be constructively involved throughout the war to ensure the proper strategic ends are accomplished. Victory in warfare is achieved when the enemy loses the ability or the will to continue fighting and the policy objectives requiring the initiation of war in the first place have been met. Thus, victory is defined by the victor since only he can know if he has achieved his purpose, but it must be confirmed by the adversary to be a clear victory. Victory in war must include breaking the will of the enemy leadership to continue the fight, but does not necessarily have to include breaking the will of the people. Thomas Schelling accurately observed that “military strategy can no longer be thought of … as the science of military victory. It is now equally, if not more, the art of coercion, of intimidation and deterrence. Military strategy … has become the diplomacy of violence.”32 Traditionally, total wars are thought to be brought to an end through one of three forms of strategy: annihilation, attrition and exhaustion. Schelling’s view offers an alternative to these total war concepts. If one accepts his proposition, the end state is achieved when the enemy loses his will to conduct future combat operations, and not necessarily when his military is destroyed, his combat personnel are reduced to the point of being ineffective, or his population or leadership is exhausted. The fundamentals of warfare have not changed. At its heart, war will always be about the use of physical force at the tactical and personal level to compel an enemy to bend to one’s will. While the fundamentals of war are unchanging, the methods of executing war are in a state of perpetual evolution. Globalization has had a tremendous effect on warfare and continues to alter its application. The explosion in global communications capabilities, the globalization of many of the world’s economies, and the expansion of international travel has permitted the development of a new type of political organization. Al Qaeda operates throughout the world, maintains no permanent home address, affiliates with no currently recognized nation-state, consists of combat troops hailing from over 60 countries, and has a membership united around a central religious belief in creation of a great Islamic state. Such an organization could not have existed 20 years ago. Couple this new type of organization with the increased ability for small groups to wage war against nation-states using biological weapons and the increased effectiveness a determined group could have on any global resource, as Colonel T. X. Hammes points out, and the nature of the threat in the 21st century has certainly evolved.33 Additionally, great power war is still very much a possibility due to the presence of traditional powers such as Russia and China and the potential of future conflict between powerful nations. While the advent and proliferation of nuclear weapons among several traditional powers has seemingly kept great power war in check since 1945, the proposition that traditional great power war is extinct due to the threat it may escalate into nuclear warfare is irresponsible. Similarly, globalization has had some potential positive effects on traditional warfare. Many believe that economic interdependence will reduce the likelihood of future conflict between nations that are dependent on each other for prosperity. The United States’ relationship with China is the example most often cited. This assertion neglects the historical record that clearly and consistently illustrates that predicting human behavior in terms of our capacity to do harm to our fellow man is tenuous, at best. Thus, to base our national security strategy on such a tenuous hypothesis would be negligent. Future warfare will include elements of traditional war, but will also be characterized by an increase in irregular and asymmetric warfare. War is innate in human behavior. In the Christian New Testament, 2 Timothy 3:12 states, “In fact, everyone who wants to live a godly life in Christ Jesus will be persecuted, while evil men and impostors will go from bad to worse, deceiving and being deceived.”34 Conflict will always persist throughout the world and will, at times, result in armed conflict in support of a political objective. While modern warfare has evolved, as Colonel T. X. Hammes says, from traditional great power wars to 5th generation warfare, at the fundamental level it has not changed.35 It is still about applying force to impose will. Military leaders have the responsibility of ensuring political leaders and their respective populations understand this basic tenet of human conflict.

#### **No impact to cyber-attacks or blackouts**

Birch, former AP correspondent, 2012,

10-1, Douglas, former foreign correspondent for the Associated Press and the Baltimore Sun who has written extensively on technology and public policy. “Forget Revolution,” <http://www.foreignpolicy.com/articles/2012/10/01/forget_revolution?page=full>

But the scenarios sketched out above are not solely the realm of fantasy. This summer, the United States and India were hit by two massive electrical outages -- caused not by ninja cyber assault teams but by force majeure. And, for most people anyway, the results were less terrifying than imagined.¶ First, the freak "derecho" storm that barreled across a heavily-populated swath of the eastern United States on the afternoon of June 29 knocked down trees that crushed cars, bashed holes in roofs, blocked roads, and sliced through power lines.¶ According to an August report by the U.S. Department of Energy, 4.2 million homes and businesses lost power as a result of the storm, with the blackout stretching across 11 states and the District of Columbia. More than 1 million customers were still without power five days later, and in some areas power wasn't restored for 10 days. Reuters put the death toll at 23 people as of July 5, all killed by storms or heat stroke.¶ The second incident occurred in late July, when 670 million people in northern India, or about 10 percent of the world's population, lost power in the largest blackout in history. The failure of this huge chunk of India's electric grid was attributed to higher-than-normal demand due to late monsoon rains, which led farmers to use more electricity in order to draw water from wells. Indian officials told the media there were no reports of deaths directly linked to the blackouts.¶ But this cataclysmic event didn't cause widespread chaos in India -- indeed, for some, it didn't even interrupt their daily routine. "[M]any people in major cities barely noticed the disruption because localized blackouts are so common that many businesses, hospitals, offices and middle-class homes have backup diesel generators," the New York Times reported.¶ The most important thing about both events is what didn't happen. Planes didn't fall out of the sky. Governments didn't collapse. Thousands of people weren't killed. Despite disruption and delay, harried public officials, emergency workers, and beleaguered publics mostly muddled through.¶ The summer's blackouts strongly suggest that a cyber weapon that took down an electric grid even for several days could turn out to be little more than a weapon of mass inconvenience.¶ "Reasonable people would have expected a lot of bad things to happen" in the storm's aftermath, said Neal A. Pollard, a terrorism expert who teaches at Georgetown University and has served on the United Nation's Expert Working Group on the use of the Internet for terrorist purposes. However, he said, emergency services, hospitals, and air traffic control towers have backup systems to handle short-term disruptions in power supplies. After the derecho, Pollard noted, a generator truck even showed up in the parking lot of his supermarket.¶ The response wasn't perfect, judging by the heat-related deaths and lengthy delays in the United States in restoring power. But nor were the people without power as helpless or clueless as is sometimes assumed.¶ That doesn't mean the United States can relax. James Lewis, director of the technology program at the Center for Strategic and International Studies, believes that hackers threaten the security of U.S. utilities and industries, and recently penned an op-ed for the New York Times calling the United States "defenseless" to a cyber-assault. But he told Foreign Policy the recent derecho showed that even a large-scale blackout would not necessarily have catastrophic consequences.¶ "That's a good example of what some kind of attacks would be like," he said. "You don't want to overestimate the risks. You don't want somebody to be able to do this whenever they felt like it, which is the situation now. But this is not the end of the world."

#### Their Pennington impact is incoherent- the expert they cite says a grid shutdown that lasts over a year would cause loss of life- no blackout ever lasted more than a few days – don’t give any probability to such alarmism

#### Too difficult to launch a cyber-attack and economic, military factors check full-scale attacks

Birch, former AP correspondent, 2012,

10-1, Douglas, former foreign correspondent for the Associated Press and the Baltimore Sun who has written extensively on technology and public policy. “Forget Revolution,” <http://www.foreignpolicy.com/articles/2012/10/01/forget_revolution?page=full>

But pulling off a cyber assault on that scale is no easy feat. Weiss agreed that hackers intent on inflicting this kind of long-term interruption of power would need to use a tool capable of inflicting physical damage. And so far, the world has seen only one such weapon: Stuxnet, which is believed to have been a joint military project of Israel and the United States.¶ Ralph Langner, a German expert on industrial-control system security, was among the first to discover that Stuxnet was specifically designed to attack the Supervisory Control and Data Acquisition system (SCADA) at a single site: Iran's Natanz uranium-enrichment plant. The computer worm's sophisticated programs, which infected the plant in 2009, caused about 1,000 of Natanz's 5,000 uranium-enrichment centrifuges to self-destruct by accelerating their precision rotors beyond the speeds at which they were designed to operate.¶ Professionals like Weiss and others warned that Stuxnet was opening a Pandora's Box: Once it was unleashed on the world, they feared, it would become available to hostile states, criminals, and terrorists who could adapt the code for their own nefarious purposes. But two years after the discovery of Stuxnet, there are no reports of similar attacks against the United States. What has prevented the emergence of such copycat viruses?¶ A 2009 paper published by the University of California, Berkeley, may offer the answer. The report, which was released a year before Stuxnet surfaced, found that in order to create a cyber weapon capable of crippling a specific control system ­­-- like the ones operating the U.S. electric grid -- six coders might have to work for up to six months to reverse engineer the targeted center's SCADA system.¶ Even then, the report says, hackers likely would need the help of someone with inside knowledge of how the network's machines were wired together to plan an effective attack. "Every SCADA control center is configured differently, with different devices, running different software/protocols," wrote Rose Tsang, the report's author.¶ Professional hackers are in it for the money -- and it's a lot more cost-efficient to search out vulnerabilities in widely-used computer programs like the Windows operating system, used by banks and other affluent targets, than in one-of-a-kind SCADA systems linked to generators and switches.¶ According to Pollard, only the world's industrial nations have the means to use the Internet to attack utilities and major industries. But given the integrated global economy, there is little incentive, short of armed conflict, for them to do so. "If you're a state that has a number of U.S. T-bills in your treasury, you have an economic interest in the United States," he said. "You're not going to have an interest in mucking about with our infrastructure."¶ There is also the threat of retaliation. Last year, the U.S. government reportedly issued a classified report on cyber strategy that said it could respond to a devastating digital assault with traditional military force. The idea was that if a cyber attack caused death and destruction on the scale of a military assault, the United States would reserve the right to respond with what the Pentagon likes to call "kinetic" weapons: missiles, bombs, and bullets.¶ An unnamed Pentagon official, speaking to the Wall Street Journal, summed up the policy in less diplomatic terms: "If you shut down our power grid, maybe we will put a missile down one of your smokestacks."¶ Deterrence is sometimes dismissed as a toothless strategy against cyber attacks because hackers have such an easy time hiding in the anonymity of the Web. But investigators typically come up with key suspects, if not smoking guns, following cyber intrusions and assaults -- the way suspicions quickly focused on the United States and Israel after Stuxnet was discovered. And with the U.S. military's global reach, even terror groups have to factor in potential retaliation when planning their operations.

#### Nuclear power is safe now – post-Fukushima regulations

Holt, Specialist in Energy Policy, CRS, 2012

[6/20/12, Mark, Specialist in Energy Policy at the Congressional Research Service, “Nuclear Energy Policy,” RL33558, <http://www.fas.org/sgp/crs/misc/RL33558.pdf>]

The Fukushima accident has raised particular policy questions for the United States because, unlike Chernobyl, the Fukushima reactors are similar to common U.S. designs. Although the Fukushima accident resulted from a huge tsunami that incapacitated the power plant’s emergency diesel generators, the accident dramatically illustrated the potential consequences of any natural catastrophe or other situation that could cause an extended “station blackout” – the loss of alternating current (AC) power. Safety issues related to station blackout include standards for backup batteries, which now are required to provide power for 4-8 hours, and additional measures that may be required to assure backup power. The Institute of Nuclear Power Operations (INPO) released a detailed description of the Fukushima accident in November 2011.30 Safety concerns at U.S. reactors were also raised by hydrogen explosions at four of the Fukushima reactors—resulting from a high-temperature reaction between steam and nuclear fuel cladding—and the loss of cooling at the Japanese plant’s spent fuel storage pools. Other safety issues that have been raised in the wake of Fukushima include the vulnerability of U.S. nuclear plants to earthquakes, floods, and other natural disasters, the availability of iodine pills to prevent absorption of radioactive iodine released during nuclear accidents, and the adequacy of nuclear accident emergency planning. In response to such concerns, NRC on March 23, 2011, established a task force “made up of current senior managers and former NRC experts” to “conduct both short- and long-term analysis of the lessons that can be learned from the situation in Japan.”31 The Near-Term Task Force issued its report July 12, 2011, making recommendations ranging from specific safety improvements to broad changes in NRC’s overall regulatory approach.32 NRC staff subsequently identified several of those actions that “can and should be initiated without delay.”33 The NRC Commissioners largely agreed with the recommendations on October 18, 2011, and instructed the agency’s staff to “strive to complete and implement the lessons learned from the Fukushima accident within five years—by 2016.”34 Tier 1 regulatory actions, which are to get underway immediately, include: • Seismic and flood hazard reevaluations and walkdowns. Nuclear plant operators will be required to evaluate the implications of updated seismic and flooding models, including all potential flooding sources. Plant operators will be required to identify and verify the adequacy of flood and seismic protection features at their sites. • Station blackout regulatory actions. NRC will issue an advance notice of proposed rulemaking (ANPR) with the goal of requiring that nuclear power plants be able to cope with the total loss of AC power (station blackout) for at least eight hours. The eight hour period is intended to give plant personnel enough time to restore AC power or, if that is not possible, to take actions to extend the plant’s ability to cope with the loss of AC power to at least 72 hours. The eight-hour coping time would rely only on permanently installed equipment, while the 72-hour coping time could rely on off-site, portable equipment. Enough equipment and personnel would be required to protect all affected reactors at a multi-unit plant. While new regulations are being prepared, NRC is to order plant operators to protect emergency equipment from damage from external events and ensure that enough equipment is available to protect all reactors at a plant site. • Reliable hardened vents for Mark I containments. NRC will order nuclear plants to install vents for the containments in Mark I reactors (the type at Fukushima). The vents would be designed to reduce containment pressure while preventing hydrogen in the containment from leaking into the reactor building, as occurred at Fukushima. • Spent fuel pool instrumentation. NRC will order nuclear plants to install safety instrumentation to monitor spent fuel pool conditions, such as water level, temperature, and radiation levels, from the plant control room. • Strengthening and integrating accident procedures and guidelines. NRC will order nuclear plants to modify emergency operating procedures to integrate severe accident management guidelines and extensive damage mitigation guidelines. The modifications would have to specify clear command-and-control strategies and establish training qualifications for emergency decisionmakers. • Emergency preparedness regulatory actions. Pending a rulemaking, NRC will order nuclear plants to ensure adequate emergency preparedness training for multi-reactor station blackouts and other emergencies. The NRC staff slightly modified its proposals for top priority actions and divided the remaining Task Force proposals into two lower tiers, which were determined to require further assessment and potentially long-term study. Included in the lower-tier actions were requirements for emergency water supply systems for spent fuel pools, secure power for emergency communications and data systems, confirmation of seismic and flooding hazards, and modifications to NRC’s regulatory process.35 On March 12, 2012, NRC issued its first nuclear plant safety requirements based on the lessons learned from Fukushima. NRC ordered U.S. nuclear plant operators to begin implementing safety enhancements related to the loss of power caused by natural disasters, reactor containment venting, and monitoring the water levels of reactor spent fuel pools. Nuclear plant operators were required to begin implementing the requirements immediately and come into full compliance no later than the end of 2016.36 NRC also issued an advance notice of proposed rulemaking for new regulatory actions on station blackout March 20, 2012.37 Legislation introduced after the Fukushima accident includes the Nuclear Power Plant Safety Act of 2011 (H.R. 1242), introduced by Representative Markey on March 29, 2011. It would require NRC to revise its regulations within 18 months to ensure that nuclear plants could handle major disruptive events, a loss of off-site power for 14 days, and the loss of diesel generators for 72 hours. Spent fuel would have to be moved from pool to dry-cask storage within a year after it had cooled sufficiently, and emergency planning would have to include multiple concurrent disasters. NRC could not issue new licenses or permits until the revised regulations were in place.

#### US has the best safety record

Holt, Specialist in Energy Policy, CRS, 2012

[6/20/12, Mark, Specialist in Energy Policy at the Congressional Research Service, “Nuclear Energy Policy,” RL33558, http://www.fas.org/sgp/crs/misc/RL33558.pdf]

In terms of public health consequences, the safety record of the U.S. nuclear power industry in comparison with other major commercial energy technologies has been excellent. During more than 3,500 reactor-years of operation in the United States,44 the only incident at a commercial nuclear power plant that might lead to any deaths or injuries to the public has been the Three Mile Island accident, in which more than half the reactor core melted.45 A study of 32,000 people living within five miles of the reactor when the accident occurred found no significant increase in cancer rates through 1998, although the authors noted that some potential health effects “cannot be definitively excluded.”46

#### No way to credibly assess meltdown risk – their advantage is flawed

Makhijani, president of IEER, 2011

[7/21/11, Arjun, president of the Institute for Energy and Environmental Research, electrical and nuclear engineer with 37 years of experience, Bulletin of the Atomic Scientists round table discussion, “Is nuclear energy different than other energy sources?,” “The Fukushima tragedy demonstrates that nuclear energy doesn’t make sense,” http://www.thebulletin.org/web-edition/roundtables/nuclear-energy-different-other-energy-sources]

Meltdown rates and bureaucracy. Those who promote nuclear power have hidden behind two related assumptions: first, that severe accidents will be extremely rare -- once every several hundred years if several hundred reactors are operational; and, second, that we are prescient enough to know the accident mechanisms and calculate their probabilities. The current tally: one in every 100 commercial light water power reactors, the most common design in the world (including all operating US commercial reactors), has now had a partial or full meltdown before its first 40-year license period has expired -- three at Fukushima Daiichi and one at Three Mile Island. The Fukushima meltdowns have had serious containment failures. In addition, there have been four hydrogen explosions and heating up or boiling of one or more spent fuel pools, which often have larger stores of long-lived radioactivity than the reactors. This severe accident rate -- one every five to 10 years for which a few hundred reactors have been operational -- is far greater than regulators and proponents imagine. So, we simply do not know how to reliably calculate the probabilities of such events, which remain rare in theory, but evidently not so rare in practice. And each accident sequence has been unique. There even appear to be differences among the meltdowns at the Fukushima reactors. Still, the US regulatory process moves ahead, relying on the perilous notion that these terribly dangerous events can be calculated -- though the official numbers are now in the realm of statistical fiction.

#### Their chemical plant scenario just says there would be explosion not that it would be on the same level as nuclear explosions

#### No impact to meltdowns

Strupczewski, Institute of Atomic Energy, 03

[1/28/03, A., Institute of Atomic Energy, Swierk, Poland, Applied Energy, “Accident risks in nuclear-power plants,” vol. 75, ScienceDirect]

\*\*\*NPP = nuclear-power plant

\*\*\*TMI = Three Mile Island

\*\*\*OECD = Organisation for Economic Co-operation and Development

1. Safety goals for nuclear power The general safety objective for nuclear-power plants (NPPs) is to protect the individual, society and the environment by establishing and maintaining in NPPs effective measures against radiological hazards. To reach this objective, safety goals for nuclear power were established from the very beginning of its development, and made more demanding as the technology matured. The initial qualitative targets were that no individual should bear a significant additional risk due to nuclear-power plant operation and the societal risks from power-plant operation should not be a significant addition to other societal risks [1]. They were followed by quantitative requirements, which according to US rules set the design targets so that the calculated plant core-damage frequency (CDF) should be less than 10-4 events per reactor year (R–Y) [2], and the calculated large release frequency (LRF) less than 10-6/R–Y for sequences resulting in a greater than 0.25 Sv whole-body dose over 24 h at one-half mile from the reactor. These requirements for NPP design corresponded to the cancer risk to the people in the critical population group equal to 10-10/R–Y [3]. Presently the safety objectives developed by the US and European utilities for the new generation of NPPs include a maximum permissible CDF equal to 10-5/R–Y [4]. It must also be demonstrated that early containment failure is avoided for all risk-significant scenarios. The cumulative LRF must be less than 10-6/R–Y. In parallel with the development of these targets, the nuclear industry and regulators in the countries leading in nuclear safety have developed the contemporary nuclear safety philosophy, which resulted in reducing risks in NPPs far below those risks typical for other power-industry branches. It places the principle ‘safety first’ as its cornerstone and includes several principles that are today the basis of NPP design and operation in all western countries. 2. Nuclear-power plant safety indicators The progress in the safety level of NPPs is reflected in the probabilistic safety analyses (PSAs), initiated in the US in 1975 by the Rasmussen Study and systematically developed to become standard tools used for safety analysis of every NPP. The importance of PSA in the evaluation of NPP safety is due to the fact that there has been only one severe core damage accident in water-moderated reactors, namely the Three Mile Island accident in the USA in 1978, so there are no historical statistical data as for coal-mine accidents, oil-transport accidents, gas explosions or dam breaks. Minor incidents that do happen in NPPs, although they are eagerly publicized by the media, usually are far below the level at which any hazard to the plant or the public would be involved. Moreover, in view of fast improvements of NPP technology, the analysis of the safety of the plants to be built cannot be based on historical experience with the plants put into operation 20 or even 10 years ago, but must reflect the actual safety features of the upgraded new designs. PSA makes it possible to study the new design features and evaluate which of the safety improvements will bring the required safety upgrading. The main condition for preventing massive releases of radioactivity is to maintain the reactor containment integrity, first of all in the early stage of the accident, then in the later stages when the releases of radioactivity would be less but still significant. In the middle of the 1990s, several mechanisms were considered as possible contributors to an early containment failure. Over the last decade, the intensive research and development of the technical means of coping with severe accidents have resulted in our being able to treat these issues as resolved. The results of several reactor-safety studies performed in Western countries show that the safety of the modern NPPs is very high. For example the German risk-study phase B [5] indicated that the frequency of core melt in Biblis B NPP was 10-4/(R– Y) and that of large radioactive releases 2.6x10-5/(R–Y). After taking into account operator actions preventing the reactor’s pressure-vessel melt-through under high pressure, the frequency of the core melt frequency was reduced to 2.6x10-6/(R–Y). Subsequent analyses performed for KONVOI plants [6] gave similar results, with absolute numbers lower due to improvements in the KONVOI type plants as compared to the Biblis B. Core-damage frequency without bleed and feed in KONVOI plants was 1.4x10-6/R–Y, and after considering the effects of operator actions in those plants, the CDF was reduced to 3.5x10-7/R–Y. These results can be considered as typical for modern PWRs. The project for the European Pressurized-Water Reactor (EPR) assumes that the design will limit the maximum possible releases so that the following safety objectives will be reached: 1. No need for short-term (about 24 h) off-site countermeasures 2. No need for population evacuation beyond 2–3 km 3. For long-term countermeasures, limited restriction of the consumption of agricultural products for a limited period (about 1 year) in a limited area is acceptable [7]. This is the level of safety of NPPs expected as a reference base in the future. Specific designs, which have been already licensed for construction, include reactors with passive safety-features AP 600 or Advanced BWR [8], for which the CDF is below 2x10-7/R–Y. The releases of radioactivity are at least ten times smaller and the health risks are negligible. 3. Radiological effects of nuclear-power plant accidents The level of safety of modern NPPs is surprisingly far from the mass-media picture of consequences of a nuclear accident. Actually, the only accidents with radioactive releases in NPPs were those in TMI and in Chernobyl. In TMI there was a reactor-core melt, but the integrity of the remaining barriers (reactor pressure vessel and containment) was maintained and the releases were so limited that the average effective dose to the public was 0.015 mSv [9]. The corresponding cancer risk was below 10-6 per lifetime, less than the risk due to NORMAL yearly emissions from a coal-fired power plant at that time [10], and no health effects have ever been identified. In Chernobyl, the quantities of released fission products were significant, from 100% of noble gases down to about 4% of solid fission-products. The doses in the early phase after the accident were high. In the rescue team, 28 men died in consequence of exposure to radiation and several more of those who were treated for radiation sickness died from illnesses that may have been associated with their exposure. However, as confirmed in the UNSCEAR report of 2000, there has been no statistically significant increase in the incidence of leukaemia or any other form of cancer among workers or the public (except for child thyroid cancer), nor of deformities of babies born to members of the public [11]. An increase in the incidence of occult thyroid cancer was predicted to occur after 10 years, but actually it was found already in the first year after the accident [11]. This shows that the screening effect can be largely responsible for this observed increase. Generally the occult thyroid cancer is not fatal and can be successfully treated. Although some 2000 cases of thyroid cancer are attributed to the accident, less than 10 fatal cases have been observed. Much greater damage to health has been caused by well meaning but misguided attempts to protect and help people living near Chernobyl at the time of the accident. The evacuation of hundreds of thousands of them is now seen as an over reaction, which in many cases did more harm than good. The first reaction was to move people out. Only later, was it realized that many of them had not needed to be moved. The relocation of people destroyed communities, broke up families, and led to unemployment, depression, hypochondria and stress-related illnesses. Among the relocated populations, there has been a massive increase in stress-related illnesses, such as heart disease and obesity, unrelated to radiation. A major factor causing distress has been uncertainty about risks and in particular belief that all radiation doses can lead to cancer, as stated in the Linear No Threshold hypothesis presently used for the purpose of radiological protection. The recent report of UNPD and UNICEF [12] confirms the above statements and acknowledges that the people living in the contaminated areas receive low doses of radiation, being less than those occurring naturally in many other parts of the world. This is illustrated in Fig. 1 taken from [13] comparing lifetime doses to people around Chernobyl with the doses in European countries including Finland and Sweden, in which the population enjoys very good health and low cancer rates in spite of the high radiation background. According to Russian sources, medical monitoring of the clean-up staff has shown no increase of cancer rate and no relationship between the dose and the mortality. The overall mortality rate among the clean-up staff was statistically lower than the mortality rate of the control group from the public [14]. The UNSCEAR report also confirms that no radiation illnesses (with the exception of child thyroid diseases) have been found in the exposed population [11]. Thus, although it should be acknowledged that the effects of the Chernobyl accident are important, it should be also stressed that most of them are due to excessive fear motivated and politically expedient decisions, not to the radiation doses themselves. The NPPs planned to be built are completely different from RBMKs. The negative temperature reactivity coefficient ensures that, in accident conditions, their power will decrease, not increase as in Chernobyl, the containment (which did not exist in Chernobyl) would remain intact even after severe accidents and the accidentmanagement procedures and safety-upgrading measures implemented in the NPPs would prevent such large releases of radioactivity as was the case in Chernobyl. Thus, the radiological results of Chernobyl cannot be treated as representative of nuclear accidents in NPPs. The estimates of probable releases are made for each NPP separately within PSA studies and generally show that the hazards are much smaller than for other energy sources. 4. Comparison of nuclear-power risks with accident risks due to other energy sources The risks of electricity generation should be evaluated considering the whole cycle, from fuel mining to plant construction, to waste management and site recultivation. While in the case of the nuclear-fuel cycle, the accident risks are mostly connected with the power plant, in other fuel cycles the dominant contribution can be made by other fuel stages. For example, in the case of coal mining, the fatality ratio in the US is about 0.1 death/million tons or 3.5 death/GW(e).a [15]. In very large regions of the world, the situation can be much worse. In China, the average value for the country was about 4.6 deaths per MT in 1997 [16] and the number of mining fatalities per unit of energy produced from coal was 17 deaths/GW(e).a. In addition to that, the accident death rate in coal-fired power plants was about 2 deaths/GW(e).a [17] and in coal transport sector 8.5 deaths/GW(e).a [17]. These numbers add up to the accidental mortality in China coal power system being equal 27.5 deaths/GW(e).a. The number of fatalities due to severe accidents (involving more than 5 fatalities each) for the coal chain in OECD countries is 0.13 per GW(e) [19]. In non-OECD Fig countries, it is much higher. The everyday occupational hazards for the coal chain will be taken as 1.27 fatalities/GW(e).a according to [18], that is for European countries. It is seen, that the small accidents involve more fatalities than the large ones, so both numbers must be taken into account. The differences of the safety of hydropower in OECD and non-OECD countries are most pronounced. While the fatality ratio for OECD countries is only 0.004, it is 2.187 for non-OECD countries [15]. The data on dam safety show that differences in technology and safety practices influence very much the risk of power generation from a given facility. These differences are taken into account while discussing risks of the conventional power industry and nobody discussing the safety of a dam to be erected in the twenty-first century would base its safety indicators on accidents of dams built in say 1920. In a recent ExternE report on hydropower, the authors do not include any risk due to damfailures in the overall health risks due to hydropower [18], because they maintain that the dams built in Norway provide ‘‘negligibly small risk’’. Similarly, the progress in coal-mining safety is taken into account while estimating the number of fatalities per GW(e).a. Of course this is a correct approach. However, if we take into account the progress in dam construction before and after 1930, then the differences in NPP technology existing between RBMK reactors and LWR NPPs should be also considered. Similarly, if introducing strict regulations requiring qualified engineering supervision had a strong effect on dam safety, it is evident that the whole concept of safety culture implemented in Western NPPs has also a significant influence on nuclear-reactor safety. As the differences in design between modern PWRs and the Chernobyl RBMK are much more significant that any differences in dams erected in Norway versus those built in the USA, Italy, France etc., then following the logic accepted by EC ExternE study, the hazards due to Chernobyl should not be considered as the basis for evaluating the safety of future NPPs.

#### Humans resilient to disease- no extinction

Posner, former professor of law @ Chicago, 5 ([Richard A Posner](javascript:void(0);). [Skeptic](http://proquest.umi.com.www2.lib.ku.edu:2048/pqdweb?RQT=318&pmid=38988&TS=1237848127&clientId=42567&VInst=PROD&VName=PQD&VType=PQD). Altadena: [2005](http://proquest.umi.com.www2.lib.ku.edu:2048/pqdweb?RQT=572&VType=PQD&VName=PQD&VInst=PROD&pmid=38988&pcid=15068061&SrchMode=3). Vol. 11, Iss. 3; pg. 42, Proquest)

Yet the fact that Homo sapiens has managed to survive every disease to assail it in the 200,000 years or so of its existence is a source of genuine comfort, at least if the focus is on extinction events. There have been enormously destaictive plagues, such as the Black Death, smallpox, and now AIDS, but none has come close to destroying the entire human race. There is a biological reason. Natural selection favors germs of limited lethality; they are fitter in an evolutionary sense because their genes are more likely to be spread if the germs do not kill their hosts too quickly. The AIDS virus is an example of a lethal virus, wholly natural, that by lying dormant yet infectious in its host for years maximizes its spread. Yet there is no danger that AIDS will destroy the entire human race.

#### Technology checks a superbug

Easterbrook (Gregg, The New Republic Editor) 2003 [Wired, "We're All Gonna Die!" 11/7, http://www.wired.com/wired/archive/11.07/doomsday.html]

3. Germ warfare! Like chemical agents, biological weapons have never lived up to their billing in popular culture. Consider the 1995 medical thriller Outbreak, in which a highly contagious virus takes out entire towns. The reality is quite different. Weaponized smallpox escaped from a Soviet laboratory in Aralsk, Kazakhstan, in 1971; three people died, no epidemic followed. In 1979, weapons-grade anthrax got out of a Soviet facility in Sverdlovsk (now called Ekaterinburg); 68 died, no epidemic. The loss of life was tragic, but no greater than could have been caused by a single conventional bomb. In 1989, workers at a US government facility near Washington were accidentally exposed to Ebola virus. They walked around the community and hung out with family and friends for several days before the mistake was discovered. No one died. The fact is, evolution has spent millions of years conditioning mammals to resist germs. Consider the Black Plague. It was the worst known pathogen in history, loose in a Middle Ages society of poor public health, awful sanitation, and no antibiotics. Yet it didn't kill off humanity. Most people who were caught in the epidemic survived. Any superbug introduced into today's Western world would encounter top-notch public health, excellent sanitation, and an array of medicines specifically engineered to kill bioagents. Perhaps one day some aspiring Dr. Evil will invent a bug that bypasses the immune system. Because it is possible some novel superdisease could be invented, or that existing pathogens like smallpox could be genetically altered to make them more virulent (two-thirds of those who contract natural smallpox survive), biological agents are a legitimate concern. They may turn increasingly troublesome as time passes and knowledge of biotechnology becomes harder to control, allowing individuals or small groups to cook up nasty germs as readily as they can buy guns today. But no superplague has ever come close to wiping out humanity before, and it seems unlikely to happen in the future.

#### No risk of huge pandemic – genetic diversity

Townsville Bulletin ‘3

(“Bio-terror talk Professor says body can cope with viruses,” Australia, August 30, Lexis)

Immunogenetics researcher Professor Alan Baxter, head of JCU Comparative Genomics Centre, held a public lecture this week on the body's defences against bio-terrorism. Professor Baxter said the global epidemics people were concerned about were highly unlikely to occur. "It is not all doom and gloom, the body has a number of defences against biological weapons and emerging infections," he said. "There are a number of ways the human body has evolved to protect itself from novel infections, or infections it might not have encountered before." Professor Baxter said the requirements for an organism to cause a world-wide pandemic were very restrictive. "Very few organisms are capable of doing this," he said. "And in a mixed population such as ours there's quite a diverse range of genetic resistance strategies, meaning we're unlikely to encounter the sorts of deadly epidemics that decimated the small foundling communities of the past."