

Reading

Read this handout. Read the [Build Awareness tab](#) of my web site.

Is there hope of reducing the risk?

If my [preliminary analysis](#) is correct and the risk posed by nuclear weapons is thousands of times greater than living next to a nuclear power reactor, that leads to another key question: Is there any hope of reducing the risk thousands of times over, until it reaches an acceptable level? Are human beings capable of such monumental change?

Prof. Carol Dweck's Research

Many people dismiss reducing the risk posed by nuclear weapons as an impossible task and have told me: "You can't change human nature!" Useful insights for overcoming this barrier to facing what must seem like an important, but unsolvable challenge can be gained from the [research of Prof. Carol Dweck](#) of Stanford's Psychology Department.

Dweck studies how different people respond when confronted with a challenge that exceeds their current abilities, and how different stimuli might affect their responses. She found that some people rise to the challenge even though that might mean failing, while others shy away, fearful of failure. Her research has shown that much of this difference can be attributed to people tending to have one of two mindsets. In one mindset, ability is fixed and immutable, something you are born with and cannot change. In the other, ability is more like a muscle that can be developed by exercise and hard work.

Dweck has found that people who see ability as fixed and immutable have a strong tendency to shy away from challenges that are above their current ability and would – in their mindset – find them wanting. Conversely, she has found that people who believe ability can be improved through hard work tend to welcome such challenges as growth opportunities.

Dweck's research also found that it is possible to influence a person's response to such challenges. As described on pages 24-26 of her book, *Self Theories*:

We've succeeded in influencing students' theories of intelligence in other studies as well. One such study, with college students, was conducted by Randall Bergen (Bergen, 1992). For the study, Bergen wrote two *Psychology Today*-type articles, complete with graphics. Through the use of vivid case studies in what was said to be the latest scientific research, each article made an extremely compelling case for one of the theories [either that ability is innate and immutable or that it can be developed through effort]. In fact, even other graduate students in our lab, not knowing the origins of the articles, believed they were real. ...

[Both articles began by describing an eight-month old baby, named Adam, who had exceptional abilities, normally not seen until ages three or four.] ... The entity theory article [the first mindset] went on to explain Adam's exceptional abilities in terms of fixed, innate intelligence, concluding that the brilliance of Mozart and Einstein was mostly built into them at birth:

Their genius was probably a result of their DNA, not their schooling, not the amount of attention their parents gave them, not their own efforts to advance themselves. These great men were probably born, not made.

The incremental theory article [the second mindset, which believes that ability can be developed by hard work] began the same way but went on to explain baby Adam's unusual abilities in terms of his challenging environment. They concluded that the brilliance of people such as Leonardo da Vinci and Albert Einstein was a result of their actions and their environments, not their genes.

Bergen found that the articles had a clear impact on students' theories of intelligence and on their persistence in the face of failure, a topic we take up in the next section.

Ying Yi Hong, C. Y. Chiu, Derrick Lin, and I (Hong *et al*, 1998, study 4) also used these articles to influence college students' theories of intelligence. This study was designed as a follow-up to the study we just described, in which entering freshmen were asked about their interest in a remedial English course that could aid their scholastic performance.

The aim of this next study was to see if students who were given an entity theory of intelligence would pass up a chance to enhance their deficient skills, just as the students with entity theories had done in the original study. In this study, college students were first given Bergen's *Psychology Today*-type articles as part of their reading comprehension test. Half of them read the vivid and convincing version that espoused the entity theory and the other half read the vivid and convincing version that espoused the incremental theory. After answering some questions about the passage they had read, students went on to the second part of the study, a nonverbal ability test.

Here they worked on the set of problems and received feedback that they had done relatively well ... or relatively poorly ... However, before moving to the next set of problems, students were offered a tutorial "that was found to be effective in improving performance on the test for most people." All the students had room for improvement. The question was: Who would take advantage of this tutorial?

Interestingly, most of the students who had done fairly well elected to take the tutorial. Of the students who had done relatively well, 73.3% of those given an

incremental theory and 60.0% of those given an entity theory said they wanted to take the tutorial. ...

Among those who had done poorly, a different story emerged. The students who were exposed to the incremental theory still wanted to do tutorial (73.3% elected to take it). However, those who were exposed to the entity theory rejected the opportunity to improve their skills. Only 13.3% of the students in this group said they wanted to take the tutorial. Once again, when students have a fixed view of intelligence, those who most need remedial work are the ones who most clearly avoid it.

In short, we have shown that it is possible to influence students' theories about their intelligence, and that when we do so we influence their goals and concerns. Those who were led to believe their intelligence is fixed begin to have overriding concerns about looking smart and begin to sacrifice learning opportunities when there is a threat of exposing their deficiencies. Those who are led to believe their intelligence is a malleable quality begin to take on challenging learning tasks and begin to take advantage of the skill improvement opportunities that come their way.

Dweck's research has been concerned with individual abilities and mindsets about the self, but the same ideas seem applicable to a person's view of humanity as a whole. In a meeting I had with her, she agreed that the hypothesis sounded reasonable. Extended in that way, her results would imply that, if someone believes human nature is fixed and immutable, then bringing up concern for the nuclear threat will tend to fall on deaf ears. I had been hearing people say, "You can't change human nature!" for twenty-five years before I came across Dweck's research, but when I did, it gave that response a new context. These people were more likely to hold the entity theory mindset, while those who responded more positively were more likely to hold the incremental theory mindset.

This realization, coupled with the above-described experiments on influencing mindset, emphasized the need to couch the problem within a broader context that emphasizes humanity's capacity for change. While I had been doing that at an intuitive level for almost thirty years, coming in contact with Dweck's research brought that need into clearer focus.

Fortunately, there is a good response to "You can't change human nature!" *Human nature is to change*. Contrary to the belief that human nature is fixed and immutable, adaptability is our species' defining characteristic. Through adaptations of clothing and shelter, we have extended our range from a small tropical region to the entire globe. Through other adaptations, we have learned to fly far higher than birds, out swim fish, and even walk on the Moon.

We have also adapted our social structures in ways initially thought to be impossible. Abolishing slavery, a laughable idea two hundred years ago, became the law of the land five decades years later. Women's suffrage, which initially was seen as even more unthinkable, also came to pass. History shows that we have changed what seemed like immutable aspects of human nature when far less was at stake. Changing to ensure our survival is certainly within our power.

When we look back from today's vantage point on slavery and women's abject subjugation, we tend to wonder how people could ever have been so inhuman. But, in viewing those changes through that negative prism, we miss the miracle that individuals wrought in bringing about those positive societal upheavals. We need to reframe that "glass half empty" view and see those changes for what they were – astounding miracles in which ordinary citizens played the key role. In contrast the "half empty" view reinforces a belief system in which humanity is deficient and therefore incapable of change. The next section examines one of those societal changes in more detail.

Was there hope of abolishing slavery?

Not so long ago, most people thought slavery was an immutable part of human nature. It was sanctioned in the Bible, present in varied civilizations throughout history, and had a powerful "agro-slavery complex" supporting the institution. In that environment, questioning slavery was seen as a fool's errand. In consequence, in the election of 1840, anti-slavery candidate James Birney received just 0.3% of the vote. Twenty years later, after enough people had challenged that conventional wisdom, Abraham Lincoln became president. In the same way, little will change with respect to nuclear weapons until enough of us have the courage to question conventional wisdom and undertake what many will see as a fool's errand.

To get an idea of how powerful society's mindset was concerning slavery, consider the following excerpts from an [1856 speech](#) by Charles Jared Ingersoll, a prominent Philadelphia civic figure, Congressional representative, and author.

Without inquiring whether it [slavery] be evil, as most insist, or good, as some contend, unquestionably it is a vast, stupendous, and vital American reality. ... there should and must be considerate and patriotic Americans ... willing to accept historical, political, and philosophical ascertainment that, whether slavery be evil or not, modern external abolition is a much greater evil. Vouched by irrefutable English and American authority, negro slavery in America may be so vindicated that no American need shrink from its communion. Its abrupt, forcible, or extrinsic removal would be a tremendous catastrophe. Dismembering the United States and destroying the American republic would tend not to abolish, but perpetuate slavery. ... every lover of his country should desire to vindicate its institutions, of which this

is one, from foreign detraction ... by overruling Providence men have been slaves of masters in all ages and in every country. ... slavery and its products advance continental prosperity, maintain the grandeur of confederated United States, cheaply vouchsafe almost permanent peace, and develop a benign experiment of tranquil republican government.

If you change the issue being debated from slavery to nuclear deterrence (and modernize the language), how close does it come to some current-day arguments in favor of maintaining our current nuclear posture? Below, I've repeated some of the above arguments concerning slavery (**in boldface**) along with similar arguments made in recent years concerning nuclear weapons (*in italics*). Where possible, the latter are quotes from others. In others, I have had to compose them myself.

Without inquiring whether it [slavery] be evil, as most insist, or good, as some contend, unquestionably it is a vast, stupendous, and vital American reality.

Whether nuclear weapons are evil, as some insist, or keepers of the peace, as others contend, they are vital to America's security.

There should and must be considerate and patriotic Americans ... willing to accept historical, political, and philosophical ascertainment that, whether slavery be evil or not, modern external abolition is a much greater evil. Vouched by irrefutable English and American authority, negro slavery in America may be so vindicated that no American need shrink from its communion.

The large number of our allies who seek shelter under our nuclear umbrella proves that we have nothing to apologize for. On the contrary, the free world owes us a debt of gratitude for shouldering the burden of protecting it from hostile forces.

[Slavery's] abrupt, forcible, or extrinsic removal would be a tremendous catastrophe. Dismembering the United States and destroying the American republic would tend not to abolish, but perpetuate slavery.

the goal, even the aspirational goal, of eliminating all nuclear weapons is counterproductive. ... it risks compromising the value that nuclear weapons continue to contribute, through deterrence, to U.S. security and international stability.

The above is a quote from a November 2007 [OpEd](#) entitled "The Nuclear Disarmament Fantasy," by Harold Brown and John Deutch that criticized the [first OpEd](#) by Shultz, Perry Kissinger, Nunn as unrealistic, wishful thinking. Brown was Carter's Secretary of Defense, and Deutch was Clinton's Director of Central Intelligence, so both served in Democratic administrations.

A world without nukes would be even more dangerous than a world with them.

The above is a quote from a July 2009 [newspaper interview](#) with James Schlesinger, who served as Secretary of Defense under Nixon and Ford, Secretary of Energy under Carter, and Director of Central Intelligence under Nixon.

every lover of his country should desire to vindicate its institutions, of which this is one, from foreign detraction

It is easy for nations that do not shoulder the burden of protecting the free world to criticize our nuclear arsenal, but patriotic Americans will recognize it as the bulwark that protects those detractors as well as us from the forces of evil which, unfortunately, still exist in this imperfect world.

men have been slaves of masters in all ages and in every country

War has been an intrinsic part of human civilization in all corners of the world and throughout history. As uncivilized as nuclear deterrence may seem to some, it is far preferable to the periodic wars which afflicted Europe and the United States prior to the nuclear age and which are now a relic of the past.

slavery and its products advance continental prosperity, maintain the grandeur of confederated United States, cheaply vouchsafe almost permanent peace, and develop a benign experiment of tranquil republican government.

Nuclear weapons have kept the peace for 65 years, and at a cost that is a small fraction of either a third world war or conventional armaments that might hope to achieve the same goal. Foolishly abolishing them would expose us to risks far greater than any that the weapons themselves pose.

Prof. Yuri Zamoshkin and the *Grenzsituation*

One of my favorite perspectives that gives hope for humanity overcoming what may seem like insurmountable odds comes from the late Prof. Yuri Zamoshkin¹, a man with whom I had the great honor of working and who made important intellectual contributions to the Soviet reform movement of the 1980's:

In the philosophy of twentieth-century German and French existentialists (notably K. Jaspers), the term *grenzsituation* (border situation) has been used to designate

¹ Zamoshkin's full paper, from which this excerpt is taken, is accessible [on line](#). His paper was part of a book, *Breakthrough: Emerging New Thinking*, and the other papers in that collection also are available [on line](#). *Breakthrough* was published late in 1987, during the period of extremely rapid change in the Soviet Union. It appeared simultaneously in Russian there and in English in the West. I was privileged to be the Western Editor of the volume.

an experience in which an individual comes face-to-face with the real possibility of death. Death is no longer merely an abstract thought, but a distinct possibility. Life and death hang in the balance.

Different human beings respond to the *grenzsituation* in different ways. Some become passive and put their heads on the chopping block, so to speak. Others experience something akin to a revelation and find themselves capable of feats they never before would have thought possible. In a *grenzsituation*, some timid individuals have become heroes; some selfish individuals have become Schweitzers. And sometimes, in so transcending their normal personalities, they cheat the grim reaper and survive where normally they would not.

Until now, this notion has been applied only to individuals. But I am convinced that today it can be purposefully applied to the world as a whole. The present day global *grenzsituation* resides in the possibility for global death and global life.

This situation, for the first time in history, directly, practically, and not purely speculatively, confronts human thought with the possibility of death for the entire human race. The continuity of history, which earlier had seemed to be a given, suddenly becomes highly questionable.

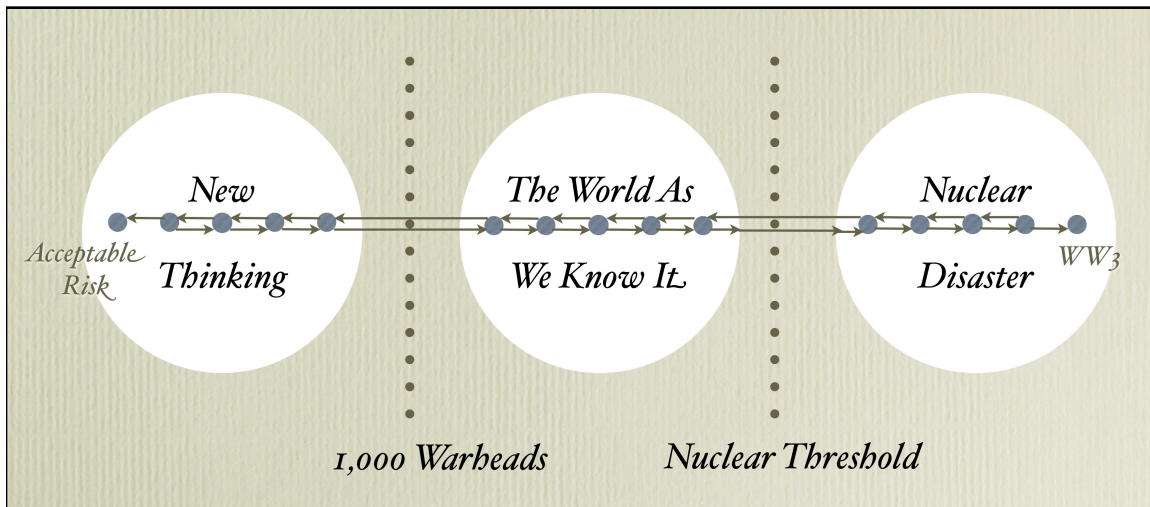
As with the individual, this global *grenzsituation* may contribute to a “revelation” in human thinking and to a positive change of character previously thought impossible for our species. ...

Of course there is also the possibility that, faced with a *grenzsituation*, mankind will go passive and put its collective head on the nuclear chopping block. But before we can learn our true mettle, we must bring the global *grenzsituation* into clear focus for all humanity. Society must see that it has but two possibilities, global life or global death.

As Zamoshkin concludes so eloquently, the first key step in defusing the nuclear threat is to bring the risk posed by nuclear weapons into clearer societal focus. Only after that has been accomplished can we learn whether human nature will succumb to the nuclear challenge or triumph over it.

Starting With Pockets of Nuclear Awareness

Bringing the global *grenzsituation* into clearer focus might seem like a small step, but gains importance when viewed in terms of the state diagram introduced earlier and repeated below.



Just at the negative possibility of a global nuclear war is almost inconceivable until risk analysis breaks it down into a sequence of smaller errors, the positive possibility also becomes clearer when viewed as a sequence of smaller steps. The intermediate goal becomes crossing the *New Thinking* threshold via a 95% reduction in the worldwide nuclear arsenal, from its current level of approximately 20,000 to 1,000.

A world with a thousand nuclear weapons still is very dangerous, but much less so than at present. It would allow 300 nuclear weapons each in the American and Russian arsenals and 400 distributed among other nuclear-armed nations. A [statement](#) I authored and that has been endorsed by a former nominee for Secretary of Defense, states that:

... Russia and the United States each have thousands of nuclear weapons, whereas a few hundred would more than deter any rational actor and no number will deter an irrational one. Either side could therefore reduce its nuclear arsenal with little to no loss in national security, even if the other side did not immediately reciprocate. In light of the growing specter of nuclear terrorism, a reduced nuclear arsenal could even enhance national security by lessening the chance for theft or illicit sale of a weapon.

Thus, while crossing the *New Thinking* threshold will require fundamental changes in our thinking, it does not require fundamental changes in our military strategy and is therefore more difficult to argue against than goals such as nuclear abolition or world peace. Once that intermediate goal has been achieved, it is critical that work continue until a state of

acceptable risk has been reached.² Unlike at the end of the Cold War, when hard-won public support was lost due to premature declarations of victory, it is essential to keep the ultimate goal in mind.

Backing up from the intermediate goal of crossing the *New Thinking* threshold, how can we start the process? What immediate goals are reasonable, yet have the potential to start a long-term process of change? Currently, I am experimenting with creating pockets of nuclear awareness, as explained on a [portion of my web site](#) that is part of this week's required reading. A [letter of encouragement](#) from former Supreme Court Justice Sandra Day O'Connor is optional reading.

It is audacious to think that a small group of Stanford students could be the catalyst for solving this immense problem. But equally inconceivable events have occurred in the past. Instead of dismissing the inconceivable by saying "That will happen when pigs fly" or "when Hell freezes over," a friend of mine used to say "That will happen when the Berlin Wall comes down." When the Berlin Wall came down in 1989, that friend told me he was going to have to re-examine a number of seemingly inconceivable possibilities.

Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has. Margaret Mead

World Leaders Provide Hope

Another very important hopeful sign is the large number of former world leaders who have endorsed a "return to the vision of Reykjavik." This refers to the October 1986 summit meeting between Ronald Reagan and Mikhail Gorbachev in Iceland's capital of Reykjavik, where for a moment they entertained the possibility of ridding the world of nuclear weapons. Their vision evaporated over differences concerning missile defense. Here is what Reagan's Secretary of State [George Shultz wrote](#) transpired:

President Reagan spoke from the heart, explaining why the United States would go forward with research on a strategic defense system in space. ... Any testing of SDI would take place in the presence of observers from the other side. If tests showed that the system worked, the United States would be obligated to share it

² Defining the ultimate goal implicitly as a state of acceptable risk has some advantages over an explicit definition such as "world peace" or "nuclear abolition." The explicit definitions generate heated debate. The implicit or operational definition is much harder to argue against and, if proponents of one or more explicit goals are correct, that can be discovered farther out in the process, when those goals do not appear as naive and unachievable.

with the Soviet Union.³ Then an agreement could be negotiated on the elimination of all ballistic missiles and on sharing SDI. Ronald Reagan presented a visionary, revolutionary, far-reaching concept, and his presentation made clear how devoted he was to that vision.

Gorbachev was highly irritated by the president's presentation. "You will take the arms race into space," he said, "and could be tempted to launch a first strike from space."

"That's why I propose to eliminate ballistic missiles and share SDI with you," replied President Reagan .

Gorbachev said regretfully that he did not believe that the United States would share SDI with the USSR. "If you will not share oil-drilling equipment or even milk-processing factories, I do not believe that you will share SDI," he scoffed. ... Tempers flared. Gorbachev hotly supported the ABM Treaty as the one agreement that had kept the world from nuclear war, and Reagan firmly pointed out that the treaty held vast populations hostage to a balance of terror.

The vision of Reykjavik, of a world free of nuclear weapons, was revived in January 2007, when four major players from the Cold War published a [surprising OpEd](#) in the *Wall Street Journal*. George Shultz, William Perry, Henry Kissinger and Sam Nunn⁴ wrote:

Ronald Reagan called for the abolishment of "all nuclear weapons," which he considered to be "totally irrational, totally inhumane, good for nothing but killing, possibly destructive of life on earth and civilization." Mikhail Gorbachev shared this vision, which had also been expressed by previous American presidents. ... Reagan and General Secretary Gorbachev aspired to accomplish more [than just arms control] at their meeting in Reykjavik 20 years ago – the elimination of nuclear weapons altogether. ... Can the promise of the NPT⁵ and the possibilities envisioned at Reykjavik be brought to fruition? We believe that a major effort

³ [An OpEd](#) that I wrote in 1986 relates to this issue of sharing only *after* we knew SDI worked.

⁴ Reagan's Secretary of State, Clinton's Secretary of Defense, Nixon's Secretary of State and former Chair of the Senate Armed Services Committee. The bipartisan nature of the initiative was emphasized.

⁵ Article 6 of the [Nonproliferation Treaty](#) states: "Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to ... nuclear disarmament, and on a Treaty on general and complete disarmament under strict and effective international control."

should be launched by the United States to produce a positive answer through concrete stages.

This OpEd was followed up by two more, in [2008](#) and [2010](#). The latter OpEd noted support from a surprisingly large number of “former U.S. officials with extensive experience as secretaries of state and defense and national security advisors,” including Madeleine Albright, Richard V. Allen, James A. Baker III, Samuel R. Berger, Zbigniew Brzezinski, Frank Carlucci, Warren Christopher, William Cohen, Lawrence Eagleburger, Melvin Laird, Anthony Lake, Robert McFarlane, Robert McNamara and Colin Powell.

A follow on video, *Nuclear Tipping Point*, featured an introduction in which former Chairman of the Joint Chiefs of Staff and Secretary of State, General Colin Powell stated:

I want to introduce this film from the stand point of a soldier who was taught to use nuclear weapons and as a diplomat who worked hard for their elimination. As a 21-year-old 2nd Lieutenant assigned to Germany, one of my first missions was to guard an atomic cannon – a huge machine that ran around Germany on a couple of trucks and its mission was to shoot nuclear weapons at the Russian armed forces if they ever came across the border in the vicinity of the Fulda Gap. ...

Many years later as a Corps Commander back in Germany commanding seventy-five thousand troops my mission was to stop the waves of Russian forces that would be coming through the Fulda Gap. In those days, we thought we could only stop the first of second wave before we would have to call for nuclear weapons to stop the rest of the Russian armies coming through. ... And we thought about what the Russians would do in return ... and we wondered whether or not it could be stopped at that level or whether it would escalate all the way up to strategic thermonuclear exchange. ...

And then I became chairman of the Joint Chiefs of Staff in 1989, and I had 28,000 nuclear weapons under my supervision and every morning I looked to see where the Russian submarines were off the coast of Virginia and how far away those missiles were from Washington and I kept track of where the Russian missiles were in Europe and in the Soviet Union. And the one thing I convinced myself of after all these years of exposure to the use of nuclear weapons is that they were useless. They could not be used. You can have deterrence with even lower number of weapons, but I mean why stop there? Why not continue on? Why not get rid of them altogether?

The real threat now is not from states that understand that we cannot use these weapons without inviting suicidal response but terrorists who do not care about suicidal response, terrorists who are prepared to commit suicide themselves.

Calls for reexamining our nuclear posture and possibly eliminating nuclear weapons reached the highest level when, in an April 5, 2009, [speech in Prague](#), President Obama became the first sitting American President to “state, clearly and with conviction, America’s commitment to seek the peace and security of a world without nuclear weapons.” All of the people quoted here called for a phased process, not immediate – and especially not unilateral – nuclear disarmament. For example, President Obama’s speech noted: “I’m not naive. This goal will not be reached quickly – perhaps not in my lifetime. It will take patience and persistence.”

Such high level support for confronting the nuclear threat, especially by entertaining the possibility of a world free of nuclear weapons, is unprecedented and a hopeful sign that change is possible.

Hope for a Better World

My preliminary analysis, and many people’s common sense, indicate that reducing the risk of a nuclear catastrophe to an acceptable level will require far-reaching changes in the world. Those changes, if enacted, will produce a far better world than the one that now exists. International conflicts will have to be resolved on a more objective basis than they are at present, and with much less violence. In a [September 25, 1961 address](#) to the UN General Assembly, President Kennedy, put the problem in stark perspective:

Every man, woman and child lives under a nuclear sword of Damocles, hanging by the slenderest of threads, capable of being cut at any moment by accident, or miscalculation, or by madness. The weapons of war must be abolished before they abolish us.

If Kennedy was even partly right that we must abolish the weapons of war before they abolish us, resolving the nuclear threat will not just remove a threat hanging over our heads, but also produce a world that previously was thought to be impossible. That is very hopeful, and my own effort in this area is pulled more by that vision than it is pushed by the threat.

Critical Thinking

The importance of critical thinking was introduced briefly in Handout #2, and is explored here in more detail. Eliminating the threat posed by nuclear weapons is such a huge task

that critical thinking may seem too small to be of any real value. Compared to other proposed goals, such as arms control or nuclear abolition or world peace, how could something as subtle as thinking things through more carefully possibly make a difference? As we have seen through risk analysis, it is best to catch a sequence of mistakes that can result in a catastrophe early in the process. The 1962 Cuban crisis started with errors in our perception of our ourselves and our adversary. Critical thinking has the potential to catch similar errors in our world view early on, allowing us to avoid crises that have the potential to spiral out of control.

Those advocating more concrete goals such as arms control, nuclear abolition, or world peace are not necessarily wrong. But none of those larger, more concrete steps is possible until society adjusts its thinking to the realities of the nuclear age. The state diagram that breaks down both the negative and positive nuclear possibilities into a sequence of small moves also helps put critical thinking in perspective. By itself, critical thinking does nothing to change the concrete reality of how many weapons we have or the war fighting plans that are in place for using them. But critical thinking roots out incorrect but deeply held beliefs, thereby creating the foundation needed for concrete changes to occur. In the old, incorrect world view, those changes looked dangerous and would never occur.

The fact that, initially, our military posture does not change even has a positive aspect: Deterrence and all other military options stay exactly as they are today, eliminating opposition that the suggested step is too risky.

We have already applied critical thinking to several assumptions on which society is operating:

- Nuclear deterrence is not broken, and it would be dangerous to try and fix it.
- Even if change were desirable or needed, it is impossible. Look at Russia's resurgent nationalism, not to mention the nut jobs running North Korea and Iran.
- Even if change were possible, I as an individual have no role to play.

This section extends that process to some additional societal beliefs. You may not agree with me that all of these need reexamination, and I may be wrong on some. The goal is not to convince you of my position, but for you to think these issues through and come to your own conclusion. If enough of us do that, and share our perspectives, I am convinced the problem will start to be solved.

1. The US is the world's sole remaining superpower.

The United States spends more on its military than the rest of the world combined. That

gives us unique capabilities, yet Russia can destroy us in under an hour. That leads to two questions: Are we the sole remaining superpower, and if not, what risk do we incur by mistakenly believing that we are? Examples of this thinking that I found in a quick Google search:

For them [jihadists] to be seen to defeat the sole remaining superpower in the same place [the border area of Afghanistan and Pakistan] would have severe consequences for the United States and the world. [[Testimony of Secretary of Defense Robert M. Gates](#) before the Senate Armed Services Committee, December 2, 2009]

Because the United States' overwhelming military might has deterred North Korea in the past, some senior American officials say there is no reason to think that Pyongyang would act irrationally in the future and threaten the world's sole remaining superpower with a missile strike. [[New York Times article](#) published June 23, 2000]

Prime Minister Suleyman Demirel of Turkey, a veteran of decades of political intrigue and the victim of military coups, offered some cautionary advice to President Bush on a visit here this week. Toppling President Saddam Hussein of Iraq, Mr. Demirel said today, would be a bad way to begin as the world's sole remaining superpower in the eyes of dozens of fragile new democracies. [[New York Times article](#) published February 13, 1992. Note that this instance of calling the US the sole remaining superpower came from a Turk, not an American.]

... they [the rest of the world] want to know exactly what the world's one remaining superpower is able to do and willing to do. [[transcript of "Special Report With Brit Hume,"](#) October 20, 2008]⁶

2. America's military strength allows us to impose our will.

This is closely related to #1 above. I see evidence for this belief in some American actions, as well as in calls for the US to undertake yet others. Some of this comes from outside the country. For example, one colleague who recently hosted a South Korean diplomat told me the man asked him why the US didn't force North Korea to give up its

⁶ Speaking of having one's frame of reference shattered: Wanting to see more liberal and more conservative takes, I first searched on "sole remaining superpower" (without the quotes) restricted to the New York Times web site. I got 95 results. I searched again, restricted to Fox News' web site and got 8 results, only one of which was relevant. I expected to see many more references on Fox. Without restricting to any one site, I got 92,300 results. Putting quotes around "sole remaining superpower" lowered that to 10,800 results.

nuclear weapons, something my colleague saw as wishful thinking. While I have the impression that this belief is widespread, I was surprised that a web search found only a few instances, for example:

THOUSANDS OF INNOCENT Americans were attacked and murdered on 11 September 2001. ... There is much to do – and the time is limited. Before us is either our finest hour or what the enemy intends as our last hours. We must be smart, impose our will, and prove that the enemy has made a profoundly stupid mistake. [[Aerospace Power Journal article](#) by Col. Richard Szafranski, USAF (Retired), Spring 2002]

3. Russia is a modern day Nazi Germany that only understands force.

This is often put in terms of the danger of appeasing Russia. While appeasement theoretically has other connotations (see #4 below), it has become a codeword for Neville Chamberlain's agreeing to Hitler's takeover of Czechoslovakia. Rather than "peace in our time" (Chamberlain's infamous claim on his return to England), appeasement now is seen as a prelude to World War II, with Hitler made stronger by such concessions. Here I was surprised at how many web pages I found. A Google search on "russia appeasement" (without the quotes) gave 596,000 results. Here's a sample:

Is that "appeasement" we see sidling shyly out of the closet of history? ... As those of a certain age will recall, "appeasement" encapsulated the determination of British governments of the 1930s to avoid war in Europe, even if it mean capitulating to the ever-increasing demands of Adolf Hitler. ... It is impossible to view the Russian onslaught against Georgia without these bloodstained memories rising to mind. [[Newsweek editorial](#) subtitled "The historical reasons why the West should intervene in Georgia," August 11, 2008.

Russia: Appeasement or confrontation? [Title of [an article in International Real Estate Digest](#), May 12, 2007. This article relates to [an incident](#) that could have resulted in Russia and Estonia, a member of NATO, coming to blows. While Russia is not blameless, [neither is Estonia.](#)]

What Russia needs most: Civil society engagement, not appeasement [Title of an [OpEd in The Christian Science Monitor](#), February 10, 2010]

Does Russian Appeasement Include Joining the WTO? [Title of a [blog post](#), September 20, 2009.

The EU's Appeasement of Russia [Title of [an article by Uffe Ellemann-Jensen](#), former Danish Minister for Foreign Affairs, April 30, 2007. This article concerned Ukrainian membership in the EU.]

Obama's Appeasement: The Obama administration chose an historic month to appease the Russians by reneging on the U.S. proposal to place ballistic missile defenses in Poland and the Czech Republic. September 1st of 2009 was the 70th anniversary of the Nazis' unprovoked attack on Poland. [[An article in *The Weekly Standard*](#), a neocon magazine]

4. Appeasement only postpones the inevitable day of reckoning. Better to stand up to bullies early on, when they are weaker, than later when the fruits of appeasement has made them stronger.

As noted in the introduction to #3 above, appeasement has come to mean buying short term gain (Chamberlain's vain belief that appeasing Hitler meant "peace in our time") at the expense of long term pain (facing a stronger Hitler when his appetite proved insatiable). Yale Prof. Paul Kennedy's article [A Time to Appease](#) questions that myth. It appeared in the July-August 2010 issue of *The National Interest*, the magazine of the Nixon Center. Key excerpts follow:

"APPEASEMENT!" What a powerful term it has become, growing evermore in strength as the decades advance. It is much stronger a form of opprobrium than even the loaded "L" word, since Liberals are (so their opponents charge) people with misguided political preferences; but talk of someone being an Appeaser brings us to a much darker meaning, that which involves cowardice, abandoning one's friends and allies, failing to recognize evil in the world – a fool, then – or recognizing evil but then trying to buy it off – a knave. Nothing so alarms a president or prime minister in the Western world than to be accused of pursuing policies of appeasement. Better to be accused of stealing from a nunnery, or beating one's family. ...

There was a time when appeasement was an inoffensive, even a rather positive term. ... Even today, Webster's dictionary's first definition of "appease" is "to bring peace, calm; to soothe," with the later negative meaning [associated with Nazi Germany] being, well, much later in the entry. ...

Even as the great powers entered the twentieth century, one of the most exceptional acts of appeasement, and repeated conciliation, was occurring – yet it is something that very few American pundits on appeasement today seem to know

anything about. It was Great Britain's decision to make a series of significant territorial and political concessions to the rising American Republic.

For example, in 1895 London decided on a diplomatic solution (read: concessions) regarding the disputed Venezuela–British Guiana border they had spent more than five decades arguing over because of the belligerent language coming out of Washington on the side of Caracas. In 1901, the cabinet overruled Admiralty opinion and agreed that Britain would give up its 50 percent share of a future isthmian (i.e., Panama) canal, to which it was perfectly entitled under the Clayton-Bulwer Treaty signed with the United States in 1850 to guarantee the waterway remained neutral. In 1903, London outraged Canadian opinion by siding with the U.S. delegates over the contentious Alaska–British Columbia border. Yet another retreat. Kaiser Wilhelm II, who so eagerly reckoned to benefit from an Anglo-American war that distracted his European rival, was bewildered that the British kept giving way – kept appeasing – when it was obvious to most naval observers that the far larger Royal Navy could have spanked the nascent U.S. fleet. London did not see things that way ... better to buy the American imperialists off, preserve their enormous mutual trade across the Atlantic and save the cost of defending Canada. Sometimes, giving way made sense. In this case, appeasement worked, and arguably played a massive role in helping to bring the United States to an official pro-British stance as the two great wars of the twentieth century approached. Curiously, I have never seen any of our current American neocons and nationalists declare it was a bad thing that Britain essentially surrendered over the isthmian canal, Venezuela, the Bering Sea seal fisheries and the Alaska boundary. ...

the basic problem [is] ... when do you know that the revisionist state is never going to be appeased by small-scale, or even middle-size, concessions? ... When do you say to yourself, “This guy can only be stopped by the threat of serious armed force and, most probably, having to use that force”? How do you know that the concession you just reluctantly made was not the last one needed? After all, Hitler assured the West that acquiring the Sudetenland was his final objective. Was it? By late 1938, Churchill was arguing that appeasement was just feeding a crocodile with smaller and smaller tidbits until it finally turned on you, and many Britons were at last beginning to agree and wanted stiffer actions. But it really wasn't until Hitler's March 1939 conquest of the rump state of Czechoslovakia – breaking his Munich promises and seizing a country without any Germans in it – that the die was cast. By the time of his move against Poland six months later, appeasement was finished, and within a year of fighting, the Appeasers, the

“guilty men,” were to be execrated for the rest of time. No wonder that policy became the greatest insult you could throw at any later political opponent. ...

Certainty about such matters only comes, I suspect, with hindsight; and there we are all wise, because we know what happened. It was wise, we now know, for the English to give up Calais to France in 1558 because they would no longer be tied to the Continent. It was wise for Stalin to stay on reasonable terms with the Japanese during the 1930s and early 1940s because he couldn't afford a Far Eastern war while Nazi Germany was preparing to blast its own way eastward. It was wise, clearly, for then-President Charles de Gaulle to extricate France from the Algerian bloodbath in the early 1960s – though “clearly” was not a word used by the French nationalists who sought to assassinate the general. It was wise, very wise, not to go to nuclear war over the Korean, Hungarian, Berlin and Cuban crises. It was wise, we can now see, for the United States to abandon the colossal encumbrance of Vietnam.

5. As with appeasement, isolationism is a short term solution that creates much larger, long term problems. The United States must be constantly vigilant, searching out and attacking evil doers before they become stronger.

This belief also can be traced to World War II. Woodrow Wilson's 1917 request for a declaration of war against Germany portrayed that war as the one that would make the world safe for democracy. When the results were far different, many Americans became disillusioned with interventionist policies and retreated into isolationism. When the Second World War broke out, isolationist sentiment made it difficult for FDR to oppose Hitler. To get elected in the 1940 presidential election, Roosevelt felt the need to promise “not send American boys into any foreign wars.” As with Chamberlain's 1938 appeasement of Hitler, isolationism is now seen as a horrible mistake that made the Second World War more devastating than needed.

In my view, the problem is not with criticizing isolationism. In today's interconnected world, ignoring external threats and opportunities would be disastrous. The problem is the assumption that, if isolationism is bad, then interventionism is good, and more intervention is even better. Each possible intervention needs to be judged on its own merits, and no single policy (always intervene or always stay isolated) is optimal.

The problem here is symptomatic of a more general error, namely black and white or bipolar thinking. In relation to nuclear weapons, this frequently manifests itself as an assumption that the only alternative to business as usual is immediate and complete nuclear disarmament. Such straw men need to be seen for what they are. For example,

Harold Brown and John Deutch (President Carter's Secretary of Defense and President Clinton's CIA Director, so two Democrats) ridiculed Shultz, Perry, Kissinger and Nunn's call for a return to the vision of Reykjavik in an OpEd entitled, "[The Nuclear Disarmament Fantasy](#)," in the following words:

the goal, even the aspirational goal, of eliminating all nuclear weapons is counterproductive ... it risks compromising the value that nuclear weapons continue to contribute, through deterrence, to U.S. security and international stability. ... No one suggests abandoning the hope embodied in such a well-intentioned statement. However, hope is not a policy, and, at present, there is no realistic path to a world free of nuclear weapons.

And, in spite of President Obama's cautionary words in his Prague speech, a July 2009 [Wall Street Journal interview](#) with former Secretary of Defense James Schlesinger concluded, "In other words: Go ahead and wish for a nuclear-free world, but pray that you don't get what you wish for. A world without nukes would be even more dangerous than a world with them, Mr. Schlesinger argues."

6. Nuclear weapons form a protective umbrella.

The metaphor of a "nuclear umbrella" protecting us is frequently used. Examples include:

15 years ago ... U.S. Defense Secretary William Perry ... clarified that European NATO countries would be covered by the U.S. nuclear umbrella regardless of whether nuclear weapons are stationed on their territory. [February 15, 2010 [OpEd](#) in *The New York Times*]

The United States has maintained a nuclear umbrella over South Korea since the Korean War. [October 2006 [article](#) on NukeStrat.com]

U.S. President-elect Barack Obama's administration will offer Israel a "nuclear umbrella" against the threat of a nuclear attack by Iran. [December 11, 2008 [article](#) in Israeli newspaper, *Haaretz*]

While the term "nuclear umbrella" is used in different ways, the most frequent implication is that the threat of American nuclear retaliation will protect our allies from all aggression. The image of an umbrella protecting one from the rain gives a positive impression, and critical thinking would examine whether or not that image is appropriate. Such an examination seems very much in order given that a Google search on "nuclear umbrella" found 330,000 results. Katy Ferron, who was a student in this seminar last quarter, observed that perhaps the nuclear umbrella is made of metal. In many rain storms it protects us, but when a lightning storm eventually blows in, it will prove deadly.

7. Thousands of nuclear weapons are needed for deterrence.

While rarely, if ever, stated so baldly, there is evidence for this belief in the strong resistance to efforts such as the New START Treaty, which will reduce both American and Russian nuclear arsenals from 2,200 to 1,550 warheads. In considering how many nuclear weapons we need, it helps to remember that President Kennedy was deterred from attacking the Soviet missiles on Cuba out of fear that even one or two might survive and retaliate by hitting American cities. It also would be good to review my [summary statement](#) (and its list of endorsers) which asserts that “a few hundred [nuclear weapons] would more than deter any rational actor and no number will deter an irrational one.” Other evidence comes from Kennedy’s Secretary of State Robert McNamara: “It is true that at that time [the Cuban Missile Crisis] we had a strategic nuclear force of approximately five thousand warheads compared to the Soviets three hundred. But despite this numerical superiority of seventeen to one, we did not believe we had the capability to launch a successful ‘first strike’ against the USSR.”⁷

8. Our nuclear deterrent is safe, secure and reliable.

A Google search on *nuclear deterrent safe reliable* produced 137,000 results. Examples include:

As long as these weapons exist, the United States will maintain a safe, secure and effective arsenal to deter any adversary, and guarantee that defense to our allies. [President Obama’s [speech in Prague](#), Czech Republic, April 5, 2009.]

For most of the nuclear era, successive U.S. administrations of both parties regarded periodic nuclear testing as essential to the maintenance of a safe, reliable and effective nuclear deterrent. [Peace Through Strength [argument](#) in favor of nuclear testing. While no date was given, it refers to a September 2009 Jason report, so it appeared after that and no later than my finding it in November 2010]

A safe, credible, secure and reliable U.S. nuclear deterrent requires a modern infrastructure and strategic force structure, no matter what level of nuclear weapons we deploy. [[U.S. Nuclear Deterrence in the 21st Century: Getting it Right](#), a white paper, July 2009. This paper has many other similar statements.]

This policy would be backed up with programs that assure that our nuclear forces are safe, secure, and reliable, and in sufficient quantities to perform their deterrent

⁷ Robert McNamara, *Blundering Into Disaster: Surviving the First Century of the Nuclear Age*, Pantheon Books, New York, 1986, pages 8-9.

tasks. [[Final Report](#) of the Congressional Commission on the Strategic Posture of the United States, May 2009]

There are variations on the words used, with *credible* sometimes substituted for *reliable*, but the point is the same. *Safe*, *secure* and *reliable* have [specific meanings](#) within the nuclear weapons industry, and some of the above quotes undoubtedly have those specialized meanings in mind. But such statements mislead people who interpret those words in their more usual sense, as most undoubtedly do. Nuclear weapon safety requires “positive measures to prevent nuclear weapons involved in accidents, incidents, or jettisoned weapons, from producing a nuclear yield,” but says nothing about how safe nuclear deterrence is, in and of itself. In fact, my paper “Risk Analysis of Nuclear Deterrence” appears to be the first attempt to quantify the latter level of safety or risk.

9. Nuclear deterrence means that we will only use our nuclear weapons in retaliation for a nuclear attack.

While this appears to be conventional wisdom, it is very wrong. Both we and other nuclear powers have used nuclear threats over relatively minor issues compared to national survival. When we threaten war that would result in destruction of our homelands, we risk everything for relatively minor goals. That was certainly the case in the Cuban Missile Crisis. As we have seen in previous handouts, the Soviets were primarily concerned with preserving Castro’s government and being treated with more respect by the United States, while both Kennedy and McNamara recognized that the Soviet missiles on Cuba did not change the strategic balance. For example, McNamara wrote that the Cuban missiles “did not change the military balance. It did, however, represent a political move that, it was believed, must be reversed.”⁸

[Threats to use nuclear weapons against Iran](#) are more recent examples of nuclear deterrence being used for lesser goals than national survival. A 2006 *New Yorker* article stated:

A senior Pentagon adviser on the war on terror expressed a similar view. “This White House believes that the only way to solve the problem is to change the power structure in Iran, and that means war,” he said. The danger, he said, was that “it also reinforces the belief inside Iran that the only way to defend the country is to have a nuclear capability.” One of the military’s initial option plans, as presented to the White House by the Pentagon this winter, calls for the use of a

⁸ Robert McNamara, *Blundering Into Disaster: Surviving the First Century of the Nuclear Age*, Pantheon Books, New York, 1986, page 9.

bunker-buster tactical nuclear weapon, such as the B61-11, against underground nuclear sites.

Another area where critical thinking needs to be applied to nuclear deterrence has to do with the name itself. In a way, *deterrence* is a marketer's dream. It implies that it will deter, when that result is, in fact, not at all ensured. As far back as the 1980's, I noted that it also could be viewed as [global version of Russian roulette](#) that I called *nuclear roulette*.⁹

10. Missile defense will make the world safer. Defense is vastly preferable to holding whole nations hostage.

Perhaps the best expression of this yearning for a more moral approach to nuclear weapons is President Reagan's March 23, 1983 so-called [Star Wars speech](#):

[We currently] rely on the specter of retaliation, on mutual threat. And that's a sad commentary on the human condition. Wouldn't it be better to save lives than to avenge them? ... Let me share with you a vision of the future which offers hope. It is that we embark on a program to counter the awesome Soviet missile threat with measures that are defensive. ... I call upon the scientific community in our country, those who gave us nuclear weapons, to turn their great talents now to the cause of mankind and world peace, to give us the means of rendering these nuclear weapons impotent and obsolete. ... This could pave the way for arms control measures to eliminate the weapons themselves. We seek neither military superiority nor political advantage. Our only purpose one all people share – is to search for ways to reduce the danger of nuclear war. ... As we cross this threshold, I ask for your prayers and your support.

On the surface, missile defense appears preferable – both militarily and morally – to nuclear deterrence, but as always, the devil is in the details. First, there is the question of whether it is possible to render nuclear weapons “impotent and obsolete” through missile defense. This is sometimes stated in terms of creating a “leakproof umbrella” that would be 100% effective against offensive missiles. After scientific studies rejected that goal as wishful thinking, proponents of missile defense shifted to other arguments, but I believe that many secretly hold that dream. I suspect that large segments of American society also

⁹ The book in which this essay appeared was published simultaneously in Russian in the Soviet Union and in English in the United States. The Russians objected to my calling the usual game *Russian roulette*, so I used the term *pistol roulette* instead. When I asked what they would call the game, they suggested *officer's roulette*, but that would have been more confusing to an American audience.

view missile defense through a simplistic filter, similar to that expressed by President Reagan.

A second problem concerns strategic stability. If the United States were to approach having a significant missile defense – and especially if the dream of a leakproof umbrella ever should seem possible – Russia would have a strong incentive to prevent completion of the system, even if nuclear threats were required. It well might seem preferable to risk nuclear war while both sides were equal, than to wait until Russia was at our mercy. This situation is similar to the arguments that were made for attacking Iraq in 2003. In 2002, speaking of Iraq’s nuclear program, [Condoleezza Rice stated](#): “The problem here is that there will always be some uncertainty about how quickly he [Saddam Hussein] can acquire nuclear weapons. But we don’t want the smoking gun to be a mushroom cloud.”

Other issues surrounding missile defense that would benefit from critical thinking are contained in my blog posts, [Is our hand in the nuclear cookie jar?](#) and [Missile Defense: A Play in One Act?](#), both of which are part of this reading assignment.

11. Russia has nothing to fear from NATO expansion.

While NATO was formed as an alliance in opposition to the Soviet Union, in today’s post-Cold War world, it is often said that Russia has nothing to fear from NATO expanding right up to its borders. In February 2010, former Secretary of State Madeleine Albright [told a group](#) of Moscow university students, “This is a new NATO ... Its enemy is not Russia.” Russia sees things differently, as evidenced by the headline of the article which says “she tried to convince a dubious Russia on Thursday that NATO is not its adversary.” If Russia’s fears were totally unfounded, it still would be wiser to inquire why it feels that way rather than dismiss its fears as delusional. (It took me a long time to learn this in my marriage, so I have some sympathy for Albright’s missing that point.)

Digging a bit deeper shows that Russia’s fears do have some basis in fact. As noted on page 17 of [handout #5](#), in July 2009 a number of leading Eastern European political leaders wrote an [Open Letter To The Obama Administration](#) condemning the Russian invasion of Georgia while totally overlooking that Georgia attacked first. Going further, the letter called for “contingency planning, prepositioning of forces, equipment, and supplies for reinforcement in our region in case of crisis as originally envisioned in the NATO-Russia Founding Act.” And, as noted on pages 15-16 of [handout #5](#), Vice Admiral Ulrich Weisser (Ret.), who was head of the policy and planning staff in the German Ministry of Defense from 1992 to 1998, [claims that](#) “Poland and the Baltic states use every opportunity to make provocative digs at Russia; they feel themselves protected by NATO and backed by the U.S.” If you have the time, re-reading the section starting on

page 6 of handout #5 entitled *Not One Inch Eastward*,, would be very relevant to this issue.

12. North Korea is a dangerous loose cannon that will only respond to military force.

One example that is used in the American media to portray North Korea in that light relates to the sinking of the South Korean ship, the *Cheonan*, on March 26, 2010. The ship broke in two and sank near the Northern Limit Line separating North and South Korea's waters, with the loss of forty-six sailors. The [official investigation](#) concluded:

... we have reached the clear conclusion that ROKS "Cheonan" was sunk as the result of an external underwater explosion caused by a torpedo made in North Korea. The evidence points overwhelmingly to the conclusion that the torpedo was fired by a North Korean submarine. There is no other plausible explanation.

The mainstream media largely accepts the results of that investigation. Initially, I too did not question those results. They seemed so authoritative, coming from an international investigation team that had reached a unanimous conclusion. That perspective is reflected in [my first blog post on the subject](#) which contrasted the sinking of the *Cheonan* with that of the *USS Maine* in Havana harbor in 1898: "Forensic evidence is much clearer in the sinking last month of the South Korean corvette *Cheonan*, with North Korea almost surely at fault." However, alternative news services to which I subscribe showed that things were not that cut and dried.

Even that first post raised doubts of a different nature. It quoted a reputable source, former CNN correspondent on North Korea, Mike Chinoy, [as saying](#), "lost in the often breathless media coverage is a critical fact — the attack did not occur in a vacuum. Indeed, in crucial ways, it is the entirely predictable outcome of an abrupt shift in North-South relations – produced not by the actions of Kim Jong Il, but by the policies of President Lee Myung-bak's administration in Seoul." Chinoy went on to explain that the Northern Limit Line was not an internationally agreed upon boundary, but one established by the United States. He also noted that "these disputed waters have been the scene of numerous naval confrontations that occasional turned deadly," including one just six months earlier which, [according to the New York Times](#), "[left] one North Korean vessel engulfed in flames." Initially, the sinking of the *Cheonan* seemed to me like tit-for-tat payback, an issue that was rarely mentioned in the mainstream media. Instead most media coverage presented this as one more instance of a crazy nation run by a nut job dictator, with the implication being that rational discussions would get us nowhere.

Soon afterward, I came across information that raised additional questions. Some of this information related to how much control the South Korean Ministry of Defense had over

both the evidence and the international commission, but the most serious issue concerned a dissenting member of the commission who been removed at the request of the South Korean military. This dissenter published [an open letter](#) alleging that the evidence did not point to a North Korean torpedo as the cause of the disaster, but rather suggested that the *Cheonan* had run aground, collided with a ship trying to rescue it, and sunk as a result. See my [second blog post](#) on this subject for details. Both the dissenter and a member of the South Korean National Assembly who criticized the report were charged by their government with defamation, which some reports allege is a criminal offense in South Korea. My [third blog post](#) on the *Cheonan* contains a South Korean Defense Ministry rebuttal, but notes that it does not deal with the five most serious allegations. My [last blog post](#) on the issue related to pictures that the South Korean military had used as the basis for claiming that torpedo parts allegedly recovered from the area where the *Cheonan* had sunk were identical to a North Korean design. A colleague of mine who is knowledgeable in this area showed me why that conclusion was not supported, and soon afterward the South Korean military confirmed that the two photographs [did not match](#), but blamed this on a “mistake by a working level staff” who had used the wrong picture.

I am not saying North Korea is innocent, just that the evidence appears highly inadequate at this point in time. This was noted, for example, in the beginning of my last *Cheonan* blog post:

North Korea may well have sunk the *Cheonan*, as concluded by the South Korean military-led investigative team. But meetings with some of my colleagues who have extensive experience in that part of the world, can be summarized by what one of them said to me: “The evidence presented by the LAPD in the O. J. Simpson trial was so bungled that more was needed to convict. Roughly the same is true of the South Korean military’s indictment of North Korea in the sinking of the *Cheonan*.”

Handout #2’s section on North Korea deals primarily with nuclear proliferation, but is highly relevant for applying critical thinking to our perspective on that nation. If you have time to review that material, it would be helpful.

13. Democracy is the solution to the world’s problems.

This mistaken belief has cost many lives and greatly complicates solving many of the world’s problems. As explained by Fareed Zakaria in *The Future of Freedom: Illiberal Democracy at Home and Abroad*, what we value is liberal democracy that protects minorities from a tyranny of the majority. The American Bill of Rights enshrines a number of anti-democratic rules to prevent just such tyranny. Even if a majority of my

countrymen want to jail me for criticizing the government, the first amendment prevents them from doing so. Hitler came to power in a democratic election – the last for a long time. During the recent revolution in Egypt it pained me to see pundits missing that what we wanted to see there was not democracy, but liberal democracy. While our wishing for the correct solution will not guarantee that it will come to pass, wishing for an incorrect solution greatly increases the chance of disaster. Zakaria lays out several other prerequisites for democracy to work, including a minimal standard of living. Starving people tend to vote for whoever seems most likely to feed them, even if it means enshrining a dictator.

Summary of Critical Thinking

Critical thinking is essential for exposing false assumptions and conclusions, but is very time consuming. As I wrote these notes, many things that I thought I knew had to be researched further, and even after that effort, there were points that I believe to be facts but that I had to call allegations. Given that none of us have that kind of time to apply to every issue that comes before us, how are we to ever reach conclusions and act on them? I have two suggestions.

First, we need to do a kind of triage. Most issues are not important enough to expend so much energy, but some demand that we be as certain as possible before taking action. It boils down to the likely consequences. Buying a new computer is a significant purchase, but making a decision on incomplete data incurs a relatively small cost. Some research is in order, but it would be irrational to invest more of one's time on that process than the likely savings. At the other extreme, decisions to go to war can cost many thousands – and potentially billions – of lives, as well as billions or trillions of dollars. I therefore propose that the deepest critical thinking be applied to questions of war and peace, and particularly before taking actions that might lead to war. Unfortunately, history shows that is rarely, if ever, done:

- The *USS Maine* probably was not sunk by the Spanish, yet it precipitated the Spanish-American War.
- World War I was sold to Americans as the war to make the world safe for democracy, which it did not.
- The second Gulf of Tonkin incident, which provided the legal basis for Lyndon Johnson's Vietnam buildup [never occurred](#).

- Contrary to statements at the time, American support for Afghan *mujahideen* fighting the Soviets started before the Soviet invasion, [almost in the hope](#)¹⁰ that the Soviets would invade. While viewed at the time as “freedom fighters” many *mujahideen* later were seen as terrorists after al Qaeda attacked the U.S.
- The 1988 downing of an Iranian airliner by the *USS Vincennes* may have been a consequence of a [much larger alleged subterfuge](#)¹¹ in which almost half of Iran’s navy was sunk by American warships.
- The two major justifications for the 2003 Iraqi invasion have been found to be groundless. Claims that Saddam Hussein collaborated on the 9/11 attacks [have been disavowed](#) by former Vice President Cheney, and possession of WMD’s also turned out to be unfounded.

I conclude with a relevant story from [Plato’s Apology](#). Socrates was perplexed when the Delphic Oracle declared him wisest of men. Comparing how much there was to know with how little he knew, this made no sense to Socrates. But since these were words from God, Socrates felt he must investigate. He went to those in Athens who had reputations as being wise, and found a constant pattern. These people knew more than Socrates about their specialties, but made the fundamental mistake of assuming their wisdom extended to areas where they knew very little. Finally, Socrates understood what the Oracle meant:

... the truth is, O men of Athens, that God only is wise; and in this oracle he means to say that the wisdom of men is little or nothing; he is not speaking of Socrates, he is only using my name as an illustration, as if he said, He, O men, is the wisest, who, like Socrates, knows that his wisdom is in truth worth nothing.

It is particularly hard to remember that ancient truth at a place like Stanford where one’s worth is judged by how much he or she knows. But that makes it all the more important to try.

¹⁰ This link is to an English translation of a French article. I have the original French article in my library, but it appears to have disappeared on line. If anyone would like the original, I can send you a copy. I checked the translation and it is accurate.

¹¹ This link is to a 1992 ABC TV newscast by Ted Koppel, but I was unable to find it on ABC’s web site. That raises questions, but given that 1992 preceded the Internet and stories on official web sites are sometimes removed, it is not damning evidence. Given the completeness of the report and the risk associated with an outright forgery, I believe it to be accurate, but am not certain.